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A NEW DEAL
IN
SECONDARY EDUCATION

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A NEW DEAL IN SECONDARY EDUCATION

By
HANS RAJ BHATIA



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PREFACE

CHANGES in secondary education had long been overdue. Our high schools had lost their sense of purpose and direction, their curricula and methods had grown stereotyped and dull, and there was a widespread feeling abroad that the system must be revised and reconstructed soon. When the *Secondary Education Commission Report* was published in 1953 the Government of India in the Ministry of Education immediately set about implementing its major recommendations. Two-pronged attack was proposed; progressive conversion of existing high schools into multi-purpose schools and improvement of library, laboratory and craft equipment in high schools not selected for conversion. The Central Government was to provide funds with matching grants from the states. The author of this book had the privilege of preparing the first draft for the Planning Commission and of sharing gratification at its acceptance. Since then much more water has flowed under the bridge. An All-India Council for Secondary Education (recently reconstituted as Directorate of Extension Programmes for Secondary Education) has been set up and through pamphlets, journals, seminars, workshops and conferences, teachers, headmasters, education officers and those connected with public examinations are being re-orientated to the new programme of reform and reconstruction of secondary education.

My recent experience as principal of an important multi-purpose school and as director of one of the seminars has convinced me that the problems arising out of the new changes in secondary education need to

be much more widely and closely studied by all concerned. It is very fortunate that, although the programme has to be phased for financial reasons, efforts at reconstruction are not piecemeal and cover every aspect of secondary education from the salary of teachers to methods of teaching.

A New Deal in Secondary Education is an attempt to deal with some of the major problems of our new programme and is designed to afford some help in the clarification of educational objectives and in the determination of programmes, procedures and activities through which these objectives are sought to be realized. It makes no claim to comprehensiveness, on the contrary it is much more sketchy and superficial than I should have liked. But my apology is that it may provoke others to write a better book on the basis of longer and larger experience and deeper study.

The book is addressed to headmasters, education officers, teachers in service and students of training colleges preparing to teach.

I have drawn freely on the *Secondary Education Commission Report* which is both natural and necessary. I consider this report the first systematic, comprehensive and practical attempt to deal with the problems of secondary education in our country. I have profited by a close study of some of the official reports of seminars and conferences, and of the journal of the All-India Council for Secondary Education, *Teacher Education*. Apart from formal acknowledgments which I have made in the text I wish to express my debt of gratitude to them. I also wish to express my deep appreciation to my colleagues, headmasters and teachers with whom I discussed these problems in the course of my work.

I am indebted to the Principal, David Hare Training College, Calcutta for the permission to include the Cumulative Record form prepared by the Bureau of Educational and Psychological Research.

Calcutta
1.11.58

Hans Raj Bhatia



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CHAPTER I

SECONDARY EDUCATION: PAST AND PRESENT

SECONDARY education occupies a very strategic position. It comes in between primary and higher education and extends into the spheres of both. As an intermediate link it sets the pace for the lower stage and provides the foundation for the higher. What basic understandings and skills receive emphasis in primary education is determined largely by the objectives and methods of high schools. A vast majority of teachers in primary schools are products of secondary education and tend to teach what and how they learned in high schools. On the other hand the quality of learning and teaching in colleges and universities depends on the scholastic foundations laid in high schools. In fact whenever university standards are criticised the responsibility is very readily shifted to secondary schools for not sending up students fit enough to profit by the higher course. It is difficult, therefore, to improve the quality of primary education or to raise the standards at the universities without improving the quality of learning and teaching in high schools. In any programme of educational reconstruction, close articulation between different stages of education will be a foremost necessity and the value and importance of secondary education in this programme cannot be exaggerated.

Besides, for a large majority of people, it is the final stage of education after which they enter life and take up employment in some industry or administrative office. Therefore efficiency in industry and administration to a large extent depends on the quality of

high school products. This majority plays an important and effective role in a democracy. They constitute in effect the country's electorate and can alone make democracy real and effective. They will elect leaders and when policies are framed, they will be the people called upon to execute those policies. Some of them may aspire to local leadership and succeed. So on their mental and moral calibre will depend the development and progress of the country. The rapid development of commerce and industry, the still more remarkable development and application of science in every sphere of life and the increasing role of planning and development projects in national life call for a much higher quality of secondary education whose products must man the vast majority of positions in every plant and project. The *Secondary Education Commission Report* is quite clear and emphatic on the point.

'The aim of Secondary Education is to train the youth of the country to be good citizens, who will be competent to play their part effectively in the social reconstruction and economic development of their country. For the proper functioning of democracy, the Centre (the Central Government) must see that every individual is equipped with the necessary knowledge, skill and aptitudes to discharge his duties as a responsible and co-operative citizen.'¹

I

The present system of secondary education in India grew up haphazardly and though its apologists claim that it is 'Britain's most distinctive contribution to modern Indian education' and that our topmost

¹ *Secondary Education Commission Report*, p. 5.

leaders in different walks of life are the products of this system, it is difficult to baulk the fact that it began without any clear understanding of aims and objectives. Whether its origin is traced to Macaulay's minute, to the early efforts of Christian missionaries or to the private institutions set up in Calcutta in the later part of the eighteenth and earlier part of the nineteenth centuries, the public were eager to acquire a knowledge of the English language and imbibe Western thought and science for cultural and practical reasons, and the government wanted to disseminate European literature and science to prepare a section of the people to fill subordinate jobs in administration. For both the objective was immediate and practical. Some of the leaders like Raja Ram Mohan Roy may have seen in Macaulay's minute a hazy vision of the far-reaching effects of this English education but both the general public and the Government do not seem to have envisaged either the full future impact of their policy or the meaning and purpose of education. In any case the conception of education as a preparation for life or as development of all-round personality never entered their thought or programme. Therefore 'the education imparted in these schools became a passport for entrance into Government services.' This was mainly due to the Proclamation issued by Lord Hardinge in 1844 that for service in public offices preference should be given to those who were educated in English schools. In consequence thereof, education was imparted with the limited object of preparing pupils to join the service and not for life.¹

The issue of Wood's *Dispatch* in 1854 marked a new

¹ *Secondary Education Commission Report*, p. 10.

approach and a new step forward in public education. Hitherto the main objective was to spread education among classes in the hope that it would filter down to masses. But the *Dispatch* for the first time recommended the introduction of a well-articulated system of education from the primary school upwards, recognised the value and importance of primary education in its own right, created a department of Public Instruction in each province, instituted a system of grants-in-aid and recommended the establishment of universities in presidency towns. These recommendations caught the imagination of the people and English education became more popular. 'High schools and colleges increased with unprecedented rapidity and students, mostly middle-class Hindus, flocked to them in their thousands. As a result, almost all the money available for the educational needs of a vast population was spent on higher English education and the claims of elementary education were conveniently shelved.'¹

The universities of Calcutta, Bombay and Madras were established in 1857 and they 'had far-reaching consequences especially on the content, range and scope of secondary education. The Universities dominated secondary schools in every respect. Secondary education instead of being a self-sufficient course preparing students to enter life after completing the course became merely a step towards the Universities and University colleges with the result that schools could not function with an independent programme of their own.'²

¹ H. V. Hampton: *Secondary Education in the Educational System*, p. 25, Oxford University Press, Bombay.

² *Secondary Education Commission Report*, p. 10.

The Hunter Commission, appointed in 1882 to report on the progress of education in the country, was quick to realise that the system had become top-heavy, that too much stress was being laid on literary education and that primary education which should have 'an almost exclusive claim on public revenues' was being neglected. They recommended that Government should withdraw as early as possible from the direct management of secondary schools and should encourage the establishment of privately managed high schools with liberal grants-in-aid and concentrate on the expansion of facilities for primary education. This led to a rapid increase in the number of private high schools and as these were allowed to charge lower rates of fee, it led to the 'multiplication of inefficient secondary schools miserably staffed and inadequately equipped.'

The Hunter Commission saw the danger of over-emphasis on the stereotyped literary education and in recommending that in upper classes there should be two courses, one literary and the other practical to fit young people for 'commercial and non-literary pursuits', they in a way paved the way for introduction of diversified courses of instruction in the secondary stage of education. But this recommendation did not bear any fruit, for the educated section of the people believed that literary education was superior to practical training and social factors like that of caste added weight to their belief.

Though secondary education made rapid progress in the decade following the Hunter Commission report, its quality remained poor for want of adequate modern equipment and suitably trained teachers. The matriculation examination, the gateway to colleges and

universities, reflected the needs of higher education and determined the content and methods of high schools.

The University Commission appointed by Lord Curzon to suggest remedies for the growing evils in secondary education and measures to raise the standard of entrance examinations made recommendations which in effect worsened the situation. The administration of secondary education was virtually transferred to universities, schools had to be 'recognised' by universities before they were allowed to send up candidates for the matriculation examination and elaborate rules and regulations were framed for such recognition. For example, one of the rules restricted admission of candidates to the matriculation examination before the age of sixteen. This was strongly resented by the intelligentsia for whom achievements in examinations were the only passport to success in life.

In the first two decades the Government of India in their efforts to reform education seem to have been exercised by two main defects, the tyranny of the matriculation examination and the uselessness of the purely literary curricula. In several states the first defect was sought to be removed by the institution of autonomous Boards of Secondary Education which replaced the authority of universities in laying down syllabuses and conducting examinations at the school final stage. 'The Secondary School Leaving Certificate was expected to furnish full information as to the progress of the pupil during the whole period of the school course as well as at the Public Examination conducted at the end of that course. On the basis of these records it was left to the employers and to principals of University colleges to entertain them in service

or to admit them to colleges for such courses of study as in the opinion of the principals concerned the pupils were best fitted.¹ No doubt these Boards removed the formal domination of universities but they failed to undermine the popular faith in, and glamour for, university education.

The exclusive emphasis on purely literary curricula was sought to be offset by the introduction of alternate courses to meet the needs of those who would take to commercial and industrial pursuits and by curtailing the use of English as the medium of instruction and examination. But here too the popular faith in the value of proficiency in English and of academic education proved too strong.

In 1917, the Calcutta University Commission was appointed under the chairmanship of Sir Michael Sadler to enquire into the state of higher education in the province and its report submitted in 1919 is the first systematic attempt to deal with the problems of secondary education. Its recommendations had a marked effect on the course of secondary education in our country. It made pointed references to the evils of the examination-ridden system in which there was no diversity of courses, the medium of instruction was English, too much stress was laid on literary studies and book-knowledge, the teachers were untrained and inefficient and their conditions of service were miserable. But the most important recommendation of the *Sadler Commission Report* was that the improvement of high school education was very essential for the improvement of higher education and that the universities were unable to control secondary education.

¹ *Secondary Education Commission Report*, p. 12.

The intermediate classes should be attached to high school classes in a new type of institution known as Intermediate Colleges. The admission test for universities should be the passing of the Intermediate examination and Boards of Secondary and Intermediate Education consisting of representatives of Government, Universities, High Schools and Intermediate Colleges should be established and entrusted with the administration and control of Secondary Education. These recommendations were accepted by several provinces and the number of high schools and intermediate colleges increased rapidly in both rural and urban areas. The public bodies took keen interest and a number of really good intermediate colleges were set up in small towns. It checked for a time the heavy exodus of students to university towns, raised the standard of instruction and cultural activities in high school classes and gave a great impetus to higher education. But one grievous mistake prevented the development of a well-articulated and self-sufficient secondary education. The matriculation examination was retained and though high school and intermediate classes had common teachers and participated in common programmes of physical, cultural and literary activities, the two retained their old courses and no attempt was made to articulate the two stages in syllabuses and courses of study. In fact they continued to be considered as two distinct stages.

Even during this period of rapid expansion no systematic and bold attempt was made to increase facilities for teachers' training and improve teachers' salaries and conditions of service.

An auxiliary committee of the Indian Statutory

Commission known as the Hartog Committee reviewed the position of secondary education in 1929 and strongly recommended the introduction of diversification of courses in high schools and the diversion of boys to industrial and commercial courses after the middle stage. They also made pointed references to defective training of teachers in training colleges and very unsatisfactory conditions of service which failed to attract suitable graduates to the teaching profession, and strongly urged that teachers could not be expected to do their best unless their general conditions of service were improved.

Realising that a large number of university graduates were not able to secure employment for which their education qualified them, the Government invited in 1937 two British experts, Messrs Abbot and Wood, to advise them on problems of educational re-organization with special reference to vocational education. The *Abbot-Wood Report* recommended the establishment of vocational institutions and polytechnics and technical and commercial high schools were started in several provinces. But one of their important recommendations was overlooked. They pointedly urged that facilities for vocational education will not by themselves solve the problem of unemployment as is commonly believed unless large-scale industries are started to provide venues of work.

In the early forties a wave of national self-consciousness swept over the whole country and even staunch supporters of the traditional system of general education were shaken in their faith. There was a widespread feeling that the prevailing system was unsatisfactory, that vested interests were preventing radical reforms,

that all and sundry should not join colleges, that standards at both the university and the high school stages were going down, that examinations were not a reliable test of young students' ability, that factions in university bodies were reducing the control and administration of public examinations to jobbery and that radical evils needed radical remedies. No doubt this popular discontent with the educational system arose out of the widespread political unrest and growing demand for national independence; yet there was a large section of the intelligentsia who genuinely desired educational reconstruction to suit the needs and aspirations of the people and who wanted secondary education to be overhauled even in the interest of university education.

The Central Advisory Board of Education issued a comprehensive report known as the *Sargent Report* after Sir John Sargent who was then Educational Adviser to the Government of India. It took due notice of the post-war educational trends in the country and realised that any new programme of educational reconstruction should on the one hand keep pace with the changes social, economic, political and industrial which have gone to the making of modern India and on the other keep abreast of the latest developments in educational theory and practice. It assessed the educational requirements of the country as a whole and recommended a system of universal, compulsory and free education between the age of six and fourteen, the Middle or the Senior Basic School being the final stage for a majority of the pupils, and a variety of courses at the secondary stage after which students may join universities or industrial and commercial vocations. But the main

objective of a good all-round education for all was strongly emphasised.

The next landmark in secondary education was the appointment of the University Education Commission in 1948 under the Chairmanship of Dr. S. Radhakrishnan. Though its primary concern was university education it could not help reviewing secondary education and made some important recommendations. It thickly underlined that 'our Secondary Education remains the weakest link in our educational machinery and needs urgent reform,' and recommended that students should be admitted to universities after twelve years of study at High School and Intermediate College. It also recommended a three-year degree course.

The *University Education Commission Report* strengthened the demand for radical changes in secondary education. The Central Advisory Board of Education recommended the appointment of a Secondary Education Commission at its 14th meeting held in January 1948 and reiterated its recommendation in January 1951, and in September 1952 the Government of India set up a Secondary Education Commission to 'examine the prevailing system of secondary education in the country and suggest measures for its re-organisation and improvement.' The terms of reference of the Commission were stated in para. 6 of the Government of India resolution as follows:

- (a) 'to enquire into and report on the present position of secondary education in India in all its parts; and
- (b) to suggest measures for its reorganisation and improvement with particular reference to —

- (1) the aims, organisation and content of secondary education;
- (2) its relationship to Primary, Basic and Higher education;
- (3) the inter-relation of secondary schools of different types; and
- (4) other allied problems

so that a sound and reasonably uniform system of secondary education suited to our needs and resources may be provided for the whole country.'

The reasons which led to the appointment of this Commission are stated in paras. 2 and 3 which are reproduced here:

'While the problems of education at the Primary and the University stages have been surveyed in recent years and steps have also been taken to improve and co-ordinate facilities for technical education, there has been no comprehensive or thorough examination of the problems pertaining to secondary education. This is however the stage which marks the completion of education for the large majority of pupils. Further it is the secondary schools that supply teachers to the Primary schools and students to universities. An efficient system of secondary education is therefore bound to affect adversely the quality of education at all stages.'

'There are other considerations which also make a survey of secondary education at the present time necessary. One of the major defects of the prevailing system of secondary education is its unilinear and predominantly academic character. A fairly uniform system of elementary education may serve the needs of children but cannot fulfil the requirements of adoles-

cents at the secondary stage when differences in aptitude and interests begin to be clearly shown. The need for the reorganisation of secondary education with diversified courses has become more urgent as a result of the acceptance by the Government of India and the State Governments of Basic Education as the pattern of education at the elementary stage.

The *Secondary Education Commission Report* issued in June 1953 is the first systematic attempt to tackle the problems of secondary education in all its aspects and has suggested far-reaching changes. Its recommendations are inspired by very laudable and sound educational ideas as the following:

‘We realize that some of the specific recommendations that we have made may have a comparatively short-range applicability, for changed conditions—social, political, economic and cultural—always postulate new educational objectives and techniques. In a changing world, problems of education are also likely to change.’

How important and vital is this approach in a country where tradition and custom die very hard and the tempo of social change has been very slow! But lest changes should be too frequent the *Report* strikes a note of warning:

‘Educational reform must be undertaken in such a way that it remains permanent over a definite period of time. Our proposals should not be subject to frequent changes by those temporarily responsible for carrying on the democratic form of Government. While we agree that experiments in education are to be continuous, we feel that the general lines of reform should be

such as would be conducive to a steady growth.'

Some of the important recommendations of the Commission are being carried out with an urgency which calls for a quick re-orientation of the approach of all those who have to deal with secondary education as headmasters, teachers, managers or parents. The Central Government is coming out with generous grants for the implementation of the new deal which is the subject of the chapters that follow.

Since these recommendations have a wide sweep it is proposed to deal with them in a separate chapter.

II

But before entering into a detailed study of the new scheme it would be helpful to go over some of the defects of the prevailing system of secondary education and examine some of the charges levelled against it. It would bring to the forefront some of the problems and issues involved.

In the first place the present system of high school education, as the *Secondary Education Commission Report* has pointed out, is 'unilinear and predominantly academic.'¹ It has the same pattern all over the country, the same set of courses, the same kind of textbooks, examinations and instructional procedures. The emphasis is on books, lessons, knowledge, languages, examinations and scholarship. It is presumed that pupils are all of one piece intellectually and have a more or less equal capacity to benefit by the course. It ignores individual differences in intelligence, aptitudes, abilities and interests with the tragic consequence

¹ *Secondary Education Commission Report*, p. 8.

that those who are not academically inclined either fail to make the grade or achieve much less. The number of pupils who fail to pass the matriculation for lack of ability in mathematics alone is legion and the colossal waste in terms of forty to fifty per cent failures at public examinations bears ample testimony to the futility of expecting all and sundry to study the same type of course. The predominantly literary course did not do much harm when only a selected few studied it, but with the national objective of universal, free and compulsory education up to the age of 14 the number of young people entering secondary schools is rapidly increasing and it is psychologically very unfair to squeeze them into the same mould of academic course. The single-pattern course may have served the needs of the country a century back but the present socio-economic structure of society needs an immense variety of talents, understandings and skills to suit an equally immense variety of jobs in commerce, industry and administration and expects education to provide for them. Diversification of courses is the most urgent need of our high schools and the present system is out of step with the times.

This exclusively academic education given in our schools does not prepare young people for life. Concerned mostly with the teaching of a number of subjects it fails to give them those insights, skills, attitudes and appreciations which make for healthy and happy adjustments in the community outside the school. The knowledge they acquire is bookish, the way they acquire it is unnatural, divorced from those situations in which knowledge is really needed, and the social and practical sides of actual life are neglected.

Unless the school itself is organised as a community in which young people have opportunities of direct experience of group life, of co-operation and mutual helpfulness, of leadership and membership, of giving and taking help, of toleration and acceptance of other people's points of view they will not develop a desirable social sense nor achieve ready adjustments in adult society. And unless the school offers opportunities for practical work and experience, for doing and making things with hands, for art, craft and manual labour, young people will not have the practical sense and skill nor appreciate the dignity of labour. The education of emotions through music and art, through enjoyment and appreciation of the sweet and the beautiful, is equally important. In brief, education should be of the whole personality. It should not only give insight and understanding but also cultivate taste and appreciation, refine feelings and teach practical sense and skill. The prevailing system stresses only bookish knowledge and is therefore narrow and one-sided.

Also in the present system English occupies an all-important place in the daily routine. Although it has been dethroned from its place as medium of instruction and examination, it is still the most important subject claiming more time and attention than any other subject and proficiency in English is supposed to make up for weakness in other fields.

Education should aim at helping all pupils in achieving effective and happy adjustment in all areas of living and it can do so only if it promotes the growth and development of the whole individual, of all aspects of personality. The present system signally fails to achieve this aim.

Secondly the teaching methods in our high schools are based on obsolete psychology and educational theory. The textbooks and examinations rule supreme and the subject matter is very carefully organised into logical wholes and presented methodically to make for easier and better understanding. Daily lessons from textbooks is the most common practice in the high schools today. There are no opportunities for direct experience and purposeful activity, knowing is not accompanied by doing though it is mostly in doing things that knowledge is needed, and students have no opportunities to exercise initiative, to take up projects, to plan and direct group work. The activity movement, which provides for units of work or centres of interest has been largely accepted in the field of primary education and this acceptance is due in no small measure to Basic education, but in the field of secondary education it has made little headway. Acquisition of knowledge is still considered the chief end and parents and teachers still prize distinctions in examinations even though the modern psychology of learning no longer approves of it. If teaching methods have a relevance for educational outcomes and if high schools have to prepare young people for life, for democratic living in which mutual helpfulness and co-operation are very important, our teaching methods must be adapted to these ends.

Secondary education is the education of the adolescent, the young person who is no longer a child and not yet an adult. He or she has certain well-marked needs and interests and the school should provide for the satisfaction of such needs and the growth and development of such interests. But high school

procedures and programmes as they are today do not cater for them.

Thirdly high school education in India has no carefully conceived plan or purpose which may guide its programmes or give unity and direction to its methods. For most of the parents and teachers high schools have been set up to prepare boys and girls for the matriculation examination, and thereafter for admission to colleges or for employment in an office. The function of secondary education has never been interpreted in terms of socio-economic goals or personality development, and high schools have seldom if ever realised their obligations to improve the life of the community or to foster, promote and develop democracy as a way of life. There is no consistent pattern because there is no guiding philosophy, no abiding purpose inspiring our school programmes. What wonder then that schools are seldom concerned with attitudes, habits, skills, appreciations, interests, ideals and ways of thinking they are encouraging and developing. The Hartog Committee for the first time pointed out that our educational system should satisfy the needs and aspirations of the people but what attempts have been made to define such needs and aspirations and build a sound educational philosophy? Professional thinking among secondary school teachers or in training colleges where they are trained is seldom directed to outcomes and goals. Their efforts in thought and practice are directed to the mastery of subjects in the syllabi.

Fourthly high schools are still dominated to a very large extent by college ideals. The teachers are prepared by colleges and under the influence

of the education and training they received while in college, these teachers naturally introduce in high schools the college point of view, the college atmosphere, spirit and ideals, and even methods of teaching. Colleges and universities enjoy enormous prestige with parents and teachers and influence their outlook to a large extent. University distinctions and degrees have a glamour which teachers and parents cannot escape and no effort is spared to score highest and best in university examinations. Since high schools are supposed to provide the foundation for such success and glory at the university, their methods and efforts are subordinated to the demands of university education. In several cases students cannot offer in college subjects which they did not study in the high school and their score in the matriculation often determines their admission to a college. Under these circumstances it is difficult for high schools to function as self-sufficient units providing for the growth and development of youth in terms of their interests and abilities. It is nowhere in the minds of parents, teachers or authorities that young people prepared adequately for life will undoubtedly succeed in universities. As larger numbers of students are seeking admission to colleges and universities, the latter are inclined to be selective in admissions but the more they raise the standard of admission the greater the zeal with which high schools prepare their students. This is the only type of articulation obtaining in high schools and colleges.

Fifthly the prevailing system of secondary education is overburdened with too many examinations and these constitute the sole means of evaluation and testing. They test memorized facts and acquisition of information

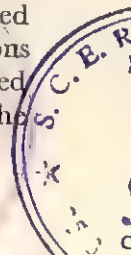
and since the subject-matter remains the same from year to year and the types of questions are uniform, systematic and large-scale attempts are made to guess the questions beforehand and there are well-organised agencies in almost every large town which guarantee success for a fee. Cram books, guess papers and keys to success are very popular and there are private tutors who have a large clientele. Such ingenuous devices and aids have vitiated high schools to such an extent that most teachers have become desperate about them. All their energies are directed to examination results because education officers, managing bodies and parents measure the efficiency and merit of teachers by results. Co-curricular work, and achievements in cultural, literary, social or physical activities serve only as a *décor* of the school. They have no place in evaluation and the school-leaving certificate makes no mention of a student's ability to work and co-operate with his fellows, to think independently and consistently, to make a speech, to participate in drama, social service and the like. The students, teachers and the school seem to be there only for examinations. Teaching methods and programmes are determined by examinations and all other outcomes are conveniently subordinated to them. When the merit of teachers and schools is judged by examination results there can be little hope of trying new and progressive ideas or of improving education in any aspect. The *Secondary Education Commission Report* says 'the dead weight of examinations has tended to curb the teachers' initiative, to stereotype the curriculum, to promote mechanical and lifeless methods of teaching, to discourage all spirit of experimentation and to place the stress on wrong or unimpor-

tant things in education.¹ And whenever and wherever attempts are made to investigate and improve matters the objective is to tighten the machinery of examinations and not to reform the nature and kind of examinations. Objective achievement tests in different subjects have neither been devised or standardized nor are they so widely known.

Sixthly expansion of educational facilities has not kept pace with popular demand with the inevitable consequence that schools are overcrowded, classes are unwieldy and the pupil-teacher ratio is low. Personal contact between teachers and pupils which is the foundation for all real education is almost impossible and qualities like discipline, social sense, loyalty to a cause, devotion to work, appreciation of things good and beautiful, which are the hall-mark of a truly educated person are not cultivated. The situation is highly depressing for teachers already harassed by economic difficulties and lack of social prestige. They have no impetus for work, they have no faith in their work, they have nothing to look for. They have lost all sense of their own worth. Inferiority, frustration and inefficiency mark their outlook on life and work.

Recently the idea of economic self-sufficiency and of creating reserve funds for better buildings and the like has ruined many good institutions. Not only the general budget should be balanced but each activity of the school should pay its way. The desire for numbers and funds has grown strong even among well-equipped and progressive schools and the rush of admissions induces them to add extras to fees. This has distracted the energies of the staff and the management from the

¹ *Secondary Education Commission Report*, p. 22.



important task of improving the quality of their educational effort and programmes. And there are a large number of high schools whose objective is mainly commercial, where progress is measured by numbers on the roll and efforts are made to produce brilliant results at public examinations mostly because such results pay heavy dividends. What chance is there for genuine educational outcomes in such an atmosphere?

Seventhly school buildings and equipment are not suited to the development of progressive programmes in education. Class-rooms are not designed for group work or for carrying out projects, libraries and reading-rooms are uninviting, there is no provision for laboratories, shops, studios, stage or auditoria which give first-hand experience or enough space for assemblies, museums, art and craft rooms or hobbies. Interior decoration of schools to reduce their drab and dull appearance is not yet seriously considered, and furniture is of the durable type with no touch of elegance or idea of comfort. Generally the school should be so built as to offer rich facilities for co-operative work in small and large groups and for a rich programme of co-curricular activities.

Eighthly textbooks are written and published to fit the traditional scheme of organising the subject-matter into logical wholes. Publishers do not take the risk of publishing texts which break with the prevailing practice and tradition. There has been practically no change in textbook writing during the last half-century or so. In fact there are some textbooks which have been used for three or four generations and which make one think that there has been little change in our textbooks or in our approach to them.

It is not difficult to add to this list of defects and readers may know of many more. But these must be strongly brought out so as to provide a basis for the reconstruction of secondary education. We have to break with the past to build anew. This, however, does not mean that the present high school has played no useful role. On the contrary it has served the country well through a period of history when it was a mere function if not a victim of the administrative policy of an alien government, and has a bright promising future in our young but rapidly maturing democracy. The principle of universal, free and compulsory primary education between the age of six and fourteen has been accepted, and in course of time, will have to be extended, in practice as well as in theory, to include the high schools of the country. The Indian High school of the future will have a much broader function, its task will be much more complex and difficult. When it opens its gates to the masses, it will have to prepare adolescent boys and girls not only for life and work but also to serve efficiently all types and degrees of student ability that find their way into its portals. For that reason the number and variety of courses offered in high schools shall have to be very large, the points of integration among courses shall have to be numerous and the organisation of community life shall have to be very carefully planned to provide training ground for democratic living in later years. This extension of the democratic ideal is inevitable and indispensable for the growth and prosperity of our democratic republic and should inspire all programmes and plans for the reform and reconstruction of secondary education in our country.

CHAPTER II

AIMS AND PURPOSES IN SECONDARY EDUCATION

WHAT is the meaning and purpose of secondary education? What are its aims and objectives? What does the high school seek to achieve? Answers to these questions will not only determine the programmes and methods of work in high schools but will also help in understanding and appreciating the trends and efforts made in the reconstruction of its pattern.

In a general way the aims of education are largely determined by the philosophy of life, culture-pattern and socio-economic conditions prevailing in any community or country and the aims of secondary education are derived from them, but most often such aims and objectives are formulated in very vague and general terms so much so that teachers and pupils fail to see any connection between aims and objectives on the one hand and curricula, methods and programmes on the other. A concise statement of aims and objectives is very essential not only for a systematic study of our educational needs and problems but also for effective planning and reconstruction of our educational effort. The short historical retrospect of secondary education given in the last chapter shows that our high schools grew up haphazardly. Today when we are planning for large-scale countrywide expansion and improvement in education, a very clear conception of the objectives of education in general and those of secondary education in particular is imperative. It will give direction and meaning to all activities and

help us to avoid defects of the prevailing system as outlined in the last chapter. Often incidental, and even false, aims enter into the mind and outlook of parents and teachers so much so that the former expect and the latter claim things which the high school is not in a position to fulfil. If both understood and accepted the main objectives of high schools and the distinctive values of the various activities they would work in closer and more effective co-operation. Finally a statement of aims is an essential part of lesson planning, both teachers and pupils will know and understand the meaning and purpose of their effort concentrating on essentials and avoiding unnecessary details. No doubt the roles of teacher and pupil are different but they have to work and strive in a mutually accepted direction.

I

In formulating aims we must bear in mind the following:—

(1) Our aims should be dynamic and functional. It must never be missed that education is a social enterprise and all educational aims are social aims. If there is a change in society these aims will change or shift in emphasis. Often education is defined as a preparation for life or its aim is conceived as development of character, good citizenship and the like, but unless the terms: life, character or good citizenship are given a precise and concrete meaning they will not be helpful. This is not an easy task for this meaning differs in different communities and states, and has changed with the changing times. When society and its institutions are growing and changing the aims of education must

be constantly re-defined in terms of the changing needs of society. In every age and state there are dissident pressure-groups whose aims differ from those of the majority but the aims of educational institutions must be worthy of a commonly accepted philosophy of life. And they must be clearly stated in specific and concrete terms. Pupils and teachers must be told what constitutes good character or good citizenship and how it functions.

(2) Usually aims are stated in terms of subject-matter or activities. Since the subject of education is the pupil, aims and objectives should be stated in terms of his or her development, that is, in terms of information and understanding, habits and skills, attitudes and appreciations, interests and abilities. The teaching of English does not mean teaching certain textbooks, writing so many essays or doing so many exercises on some items of grammar but it means the reading habit, the ability to read fluently and correctly, to grasp thought readily, to speak and write with facility and correctness and to interpret and appreciate finer thoughts. Usually the progress of pupils is measured in terms of what they have studied in textbooks or written in note-books but seldom in terms of their ability in reading, speaking and writing that language.

(3) Aims should be well within the reach of pupils. They should be attainable within the time available. If an objective cannot be achieved in the school, it is not a valid objective even though it may be most desirable socially. One of the most stupid things in education is to repeat *ad nauseam* impossible moral ideals or to force pupils to learn things beyond the limits of their abilities. So much of cant and hypocrisy

that is the tyranny of life and work in our high schools can be traced to this widespread tendency to emphasise day in and day out unattainable aims or impossible tasks. It breeds aversion among both teachers and pupils. A few schoolboys were disputing about a kitten found on the road and decided that whoever told the biggest lie should have it. Meanwhile there came along the pontific assistant-headmaster and on learning about the situation started preaching, 'Boys, when I was your age I never told a lie.' The boys quickly responded, 'The kitten is yours, Sir.' High school pupils often see through the game of proposing high-flown ideals which are not susceptible of achievement through instruction.

(4) Aims should be specific and definite so that they help in determining the method and content of teaching and in meeting particular needs of pupils.

(5) Aims should be mutually consistent and inter-related.

The *Secondary Education Commission Report* has kept these conditions admirably in view in reorientating aims and objectives of secondary education and stressed the need and importance of taking into account 'not only the facts of the existing situation but also the direction of its development and the nature and the type of the social order that we envisage for the future to which education has to be geared.'¹

II

Secondary education has suffered from a confusion of aims all over the world. While it is generally agreed

¹ *Secondary Education Commission Report*, p. 22.

that the main function of the primary school is to lay the foundations for the intellectual, emotional and physical growth and development of the child, to teach him skill in the use of the basic tools of learning and to adapt programmes and practices in and outside the classroom to the primary needs and interests of children as revealed by educational psychology, there is nothing like agreement in the aims and function of high schools. While tradition pulls secondary education towards the unilinear pattern of languages, mathematics and science, and towards the requirements of admission to college and university, the changing needs of the socio-economic structure and the varied interests and abilities of that difficult age of adolescence call for a wide diversification of courses in high schools. Most parents cling to this tradition and call it 'real education' leading to sensitivity of understanding, scholarship and intellectual discipline and preparing for courses of higher study in colleges and universities. Has it not produced leaders of thought and of action and is the need of such leaders less urgent today? It may be true, but does it suit everybody and have they ever thought of the high 'mortality figures' at the matriculation examinations? Does the traditional system of secondary education provide adequate training for workers in business and industry? Should such training be provided in separate schools? Should not young people be prepared for citizenship in a democracy? Are young people being adequately trained for social, economic and political responsibilities? Is their moral and intellectual standard satisfactory? Do they behave with dignity and poise in a crisis? Are they well informed about the world in which they live? Are they

devoted to work? These and other questions make the task of defining and reconstructing aims and purposes of secondary education very difficult.

Let us consider some of the attempts made in the West to reconstruct aims and purposes of secondary education. The Educational Policies Commission of the National Education Association of America has offered a useful and easily understood statement of the purposes of education in democracy. The objectives are grouped under four headings, those of self-realization, human relationships, economic efficiency and civic responsibility, and each of them is defined in terms of what is expected of an educated person. They are described as follows:

(1) *The objectives of self-realization*

An educated person has an inquiring mind, clear speech and reading, and effective writing, can solve problems of counting, listens and observes carefully, has knowledge of the basic facts concerning health and disease, health habits and will to work for the health of the community, enjoys sports as spectator and participant, knows the use of leisure and has an aesthetic sense. He can direct his thought and conduct.

(2) *The objectives of human relationships*

The educated person has respect for humanity, makes and enjoys sincere friends, co-operates with others, is courteous, appreciates the family

as a social institution and tries to conserve its ideals and its democratic spirit.

(3) *The objectives of economic efficiency*

The educated person is devoted to work and seeks satisfaction in good workmanship. He understands the requirements and opportunities of various jobs, makes a wise occupational choice and succeeds in his chosen occupation. He makes necessary adjustments in his work and appreciates the social value of his work. He plans the economics of his life and develops standards for guiding his expenditure. He is an efficient buyer and a wise consumer.

(4) *The objectives of civic responsibility*

The educated person believes in social justice and social activity, has social understanding and critical judgment, tolerance and regard for the nation's resources, measures the progress of science in terms of social welfare, works for international understanding, has respect for law, is economically literate and has an unswerving loyalty to democratic ideals.

This statement of aims and objectives is by no means exhaustive and can be easily enlarged. It also represents the pattern of aims and objectives of education in general. But it has a special relevance for secondary education in as much as it rests on the assumption that education is to serve the welfare of both the individual and the society.

III

Broadly speaking the purposes of secondary education may be conceived in terms of the needs of the socio-economic order into which the individual on maturity has to fit and the needs of the adolescent. Let us study them in detail.

In the first place secondary education has to meet the needs of a growing democracy that is India. 'India has recently achieved its political freedom and has, after careful consideration, decided to transform itself into a secular democratic republic. This means that the educational system must make its contribution to the development of habits, attitudes and qualities of character, which will enable its citizens to bear worthily the responsibilities of democratic citizenship and to counteract all those fissiparous tendencies which hinder the emergence of a broad, national and secular outlook. Secondly, though rich in potential resources, India is actually a poor country at present; a large majority of its people have to live at an economically subhuman level. One of its most urgent problems — if not the most urgent problem — is to improve productive efficiency, to increase the national wealth and thereby to raise appreciably the standard of living of the people. Thirdly, partly as a result of this oppressive and widespread poverty, there is a serious lack of educational facilities and the bulk of the people are so obsessed with the problem of making some sort of a living that they have not been able to give sufficient attention to cultural pursuits and activities. Hence there is need for reorientating the educational system in such a way that it will stimulate a cultural renaissance.'¹

¹ *Secondary Education Commission Report*, p. 23.

The Commission rightly points out that there are three broad categories with reference to which we shall have to formulate our aims:

- (1) 'The training of character to fit the students to participate creatively as citizens in the emerging democratic social order;
- (2) The improvement of their practical and vocational efficiency so that they may play their part in building up the economic prosperity of their country; and
- (3) The development of their literary, artistic and cultural interests, which are necessary for self-expression and for the development of the human personality, without which a living national culture cannot come into being.'

Let us consider these aims and their implications in more concrete terms.

(1) Education is essentially a social enterprise and takes much of its direction from the social philosophy of the dominant group, its commonly accepted standards and methods. We in India have pledged ourselves to develop a secular democratic republic and that should be the keynote in our educational effort and programme. Our educational system should reflect our faith in education as a means of fostering democracy as a way of life and of promoting secularism and democratic values. For a vast majority of people secondary education is the final stage of education and on this stage, therefore, must devolve the main responsibility of preparing and training citizens imbued with a democratic spirit, a democratic approach to life and its problems. Now the question before us is what qualities

and attitudes in an individual's mental and moral make-up should be specially developed and cultivated, so as to fit him 'to participate creatively as a citizen in the emerging democratic social order.'

If democracy is to endure it must demonstrate its ability to solve the problems it creates in the course of its working and it must be based on the consent of the governed. This is possible only if people have the necessary training to assemble and digest facts of their social issues and problems and to discuss them in public intelligently and dispassionately, if they are sufficiently informed about public affairs to select their leaders judiciously and to give intelligent approval or disapproval to the acts of their representatives in office, to co-operate intelligently and wholeheartedly with their chosen leaders in the solution of their problems, and if they have sufficient initiative to support or disown their leaders. Only when these conditions are fulfilled can democracy be said to function with popular consent. Thus popular consent assumes clear understanding and clear thinking on the part of all citizens. Education must not only impart knowledge but also help to cultivate wide understanding, critical thinking and clear judgment. A really educated person should be intellectually alert, anxious to search for truth without fear or prejudice; his approach should be free from the cobwebs of obsolete ideas, traditions and beliefs; he should be ever ready to convince and be convinced, to keep an open mind, to listen to the voice of reason, to be receptive to new ideas, to see through emotional appeals and propaganda; and he should have a scientific attitude to collect facts, to analyse them objectively and to draw conclusions based on them. Now thinking

originates in problems, we are compelled to think when we have doubt, confusion, difficulty or an unsatisfactory state of affairs as John Dewey has pointed out and these situations arise when we have definite goals and purposes to realise. It means that the old educational practices of giving lessons to add to the stock of knowledge must be replaced by new programmes of providing opportunities to young people to study problems themselves and to seek their solution by their own efforts. Problems are always presenting themselves and the genius of the teacher should convert them into a challenge for pupils which they try to meet with the help and guidance of the teacher.

The ability to think clearly must be accompanied by the ability to express thought clearly and accurately. Clearness in speech and writing not only helps thinking but also discussion, persuasion and exchange of thoughts which are so necessary in a democratic way of doing things. In a government by public consent public opinion on certain vital issues has to be created and built and ideas have to be put across forcefully, clearly and accurately. In human relationships, in carrying on personal and social lives as citizens in a democracy, certain basic understandings and skills in the mother-tongue are essential for all and secondary schools should strive to cultivate them among boys and girls.

Both thinking and expression are largely stimulated through group experiences, in fact the need of clearness in speech and writing arises mainly in social life and the high schools must provide rich and varied opportunities not only for debates and magazine writing as is being done in some progressive institutions but also for

discussions in smaller groups and for informal conversation in varying contexts.

If government is to be by discussion and consent, each individual citizen should have the right to free expression of his opinion and to an opportunity for developing his talents and powers in directions socially useful. The moral worth of each individual is to be accepted and this calls for the cultivation of such qualities as courtesy and consideration of other peoples' point of view, toleration of ways of thinking and living other than our own, a breadth of outlook and a willingness to co-operate with others for common ends. With accent on individual worth and freedom, life in a democracy has a rich variety and every citizen has to be sensitive and mindful of the feelings of his fellows, he has to cultivate a live-and-let-live attitude and qualities necessary for living graciously, harmoniously and efficiently with his fellow-men. He must have keen social sense so that everything which is harmful for our corporate life catches his eye and attention and he should have the strong social spirit to invite public attention to it and work for its removal. Conflicts of interest are inherent in democratic life. The interests of the family with all its internal conflicts are different from those of the caste, the local community or the state and the individual citizen is constantly called upon to appraise situations, resolve conflicts and ultimately determine action with final accountability to individual and social good. Such discriminations between the finer shades of differences in the field of personal and social relationships are marks of maturity and self-dependence which our high schools must help to develop. But above all the new generation in our

growing democracy needs a strong sense of discipline. Discipline is not merely a matter of maintaining law and order or of avoiding certain forms of behaviour. It is growth in social responsibility, a recognition on the part of every citizen that his actions are not only significant to himself but also to the welfare of other members of the community.

For some time past public life and students' activities in different states have given ample evidence of serious lack of discipline and called forth trenchant comments from both national leaders and eminent educationists. The *Secondary Education Commission Report* has made pointed reference to it:

'Discipline is an essential condition for successful group work. An indisciplined person can neither make any effective contribution to the completion of any corporate project nor develop qualities of leadership. For various reasons, standards of discipline have become deplorably lax in recent decades and a special effort needs to be made to improve them. If this is done through the adoption of intelligent and psychologically sound methods, it would be a most valuable contribution to the development of national character and would provide an important guarantee of the success of our democratic experiment.'¹

Professor H. Kabir after enumerating extreme examples of students' indiscipline agrees that 'there has been a spirit of general turbulence and rebellion among large sections of the younger generation. Some of it is no doubt part of the general sense of unrest throughout the world due to destruction of old and the failure so

¹ *Secondary Education Commission Report*, p. 25.

far to create a new set of values.¹ But some of it is peculiar to our country one should have no hesitation to accept. The problem has many facets but in so far as it rests on the mental and moral make-up of youth, secondary schools have a clear responsibility in providing varied opportunities for social experience and co-operative activities in which they persist in the face of difficulties, distractions, handicaps and failures interfering with the achievement of chosen ends, and develop an ability to withstand the effects of frustration. All discipline is self-discipline and rests on certain understandings and appreciations, sentiments and loyalties which is mainly the responsibility of secondary schools to cultivate and develop, for they deal with that stage of mental and moral development—adolescence—when such qualities and habits of thought and behaviour are needed for happy and healthy social adjustments. India is committed to planned progress and has undertaken large development-projects for the benefit of large masses of population. Her success will depend on the sense of dedication and devotion of her millions of sons and daughters, their diligence and co-operation, their service and patriotism, their sense of new values and their strong desire to take a place of pride in the world individually and nationally. If the new high schools can help to foster such understandings and appreciations among the rising generation, the problems of discipline will not present such a headache to administrators and educationists.

(2) The second condition in the national situation which should bear on the aim and purposes of secondary education is the need of improving practical or voca-

¹ Kabir, H., *Education in New India*.

tional efficiency. A good efficient worker is a national asset and in a country where every able-bodied citizen is devoted to his work and does his best and utmost, the road to prosperity is not long. But in our country respectability and work vary in inverse proportion and the dignity of work is not universally appreciated. In fact too many people, even young people, dream of jobs with high salaries and little work. This approach is very unsocial and is fatal to efficiency. It is clearly the responsibility of education to foster among students a new and vigorous approach to work. They must be made to realise that every man must work and that honest work, honestly done, is more dignified and respectable than living on patrimony or matrimony and that doing our best and utmost gives satisfaction, peace of mind and happiness which cannot be had in any other way. While vocational courses, practical training and work experience are all very necessary for practical efficiency, employers today are more concerned with the attitudes, habits and behaviour of candidates for employment, their general background as they put it, than with their specific skills and abilities. This of course is not to run down the importance of technical skill and in a way desirable habits of work are formed in the course of acquiring specific skills, but the right approach to work, colleagues and the organisation is even more important and most often determines the practical efficiency of the worker. 'Work is worship' and there is need not only to 'promote technical skill and efficiency at all stages of education so as to provide trained and efficient personnel to work out schemes of industrial and technological advancement' but also to cultivate and develop among young people such

qualities as devotion to work, love for perfection and impatience with half-hearted and slipshod output.

The introduction of craft, group work, visits to industrial plants, awards to workers in different areas of life by the Government, understanding and appreciation of other people's work and the like are steps which may stimulate young people to set themselves a higher standard and to achieve higher and better. The example of the teachers will be a very useful leaven in this direction. With a rise in the general standard of efficiency national production and wealth will increase and the standard of living will improve.

(3) 'The third main function of Secondary Education is to release the sources of creative energy in the students so that they may be able to appreciate their cultural heritage, to cultivate rich interests which they can pursue in their leisure and so contribute, in later life, to the development of this heritage.'¹ Two important considerations have led to this conclusion. In the first place, improved methods of production are providing an increasing amount of leisure time and education has accepted the responsibility for providing rich and varied opportunities for enjoyable recreation for all young people. While the place and importance of games and sports is readily recognised, aesthetic expression and appreciation have yet to win their place in the school programme. Secondly, there has been a growing realization that the development of emotional life, constructive talents and artistic taste are equally important goals of education and should not be neglected. If education is the growth and enrichment of total personality and if general

¹ *Secondary Education Commission Report*, p. 28.

education in a democracy is for all, understandings and appreciations which make for enjoyment of beauty in all its forms should be available to all. Drawing, painting, music, literature, dancing and hobbies must be given an increasing place in the school work and cultural programmes of dramatics, dance and music should be periodically organised in all schools. If parents take an active part in such programmes the life of the community will also be enriched. The cultural heritage of India is rich and varied and its growing appreciation and enjoyment will not only lend colour and harmony to our life today but also help emotional integration of the diverse parts and sections of her people. The organisation of youth festivals on inter-school, inter-university or inter-State basis is a step in the right direction.

IV

But the aims and purposes of secondary education have to be formulated not only in terms of our socio-economic structure but also in terms of the urgent needs of adolescence, a stage termed critical by common consent. The high school is designed for adolescents and our knowledge of the nature, needs, growth and development of adolescents should guide us in formulating aims and purposes of the programmes, activities, curricula and other aids and services we provide in our high schools.

Adolescence is a period of transition and transformation. No longer a child and not yet an adult, the adolescent grows rapidly both in mind and body. This rapid growth involves radical changes in interests

and attitudes which are of great importance in education. The greater the change the more urgent and difficult is the problem of adjustment. That is why the period of adolescence is one of great stress and strain which if unresolved may do great harm to the individual. Let us recall some of these changes so that our aims and purposes, programmes and activities keep them in view.

In the first place there is a growing differentiation in interests and abilities. For one thing the adolescent begins to discriminate between things, persons and situations and his adjustments are more specific and in accord with the finer distinctions he makes in his social situations. For another there is increasing differentiation in intelligence and in plans for life-occupations and vocations. The world has become more meaningful to him, some finer shades of problems begin to be noticed and sharp distinctions begin to be drawn among individuals he meets and the remarks they make. He reacts more strongly to his environment and his approvals and disapprovals are more discriminative. This growth in sensitiveness is carried into his plans for life. He begins to weigh different occupations, to form ambitions and goals and to dream about his future. He would like to try his hand at several things to see what suits him most. The high school has to study such differentiation of interest, ability and intelligence and provide opportunities for growth and development in different directions.

But in spite of such differentiation there are several functions and responsibilities common to all. They are all citizens and have to receive a common training for their civic duties, they have a common cultural

heritage and must study, understand and appreciate it, and as members of the great human family they have to acquire qualities of head and heart which will ensure mutual understanding, sympathy and helpfulness, and place human relationship on a broader plane of international toleration and peace.

Thus secondary education must provide both liberal education to help adolescents to achieve healthier and happier adjustments in life and society and to develop constructive interests in its problems, and vocational education suited to the different abilities and interests of adolescents.

Secondly, as a part of the normal process of growing-up, adolescents have a strong desire for independence, for self-direction and self-dependence. They want to be accepted and recognised as adults free to choose and decide for themselves, to take initiative and responsibility. High school programmes must provide for activities and experiences in which self-direction and initiative find ample scope.

Thirdly adolescence is an age of strong emotions and high school students are known to be erratic, easy victims of moods and passing emotions. They are as easily elated as they are offended, rigidly loyal at one time and defiant at another, depressed by slight criticism and buoyant for small praise. This is both a challenge and an opportunity. If school work offers numerous opportunities for games and sports in which boys and girls enter into contests and obtain satisfaction and joy in achievement, for drawing and painting, singing and dramatics, debates and hikes which offer healthy outlets to their strong emotions, raw emotions will be tamed through supervised and directed expressions.

Fourthly in the adolescent there is a hunger for security, for affection, for being wanted and needed—not for his ability or usefulness—but for being a person he is. He wants to belong somewhere. He needs sympathy and encouragement, friends, a warm social climate. Unless teachers share his enthusiasms and encourage him in his ventures and unless schools provide him with numerous clubs, teams, hiking groups, study circles where he does things in small groups, indulges in pleasurable conversation with his fellows and experiences the joy of lending and borrowing help, his basic psychological need will remain unfulfilled and his adjustments to life situations will be marred by confusion, inadequacy and diffidence.

Arising out of adolescents' need for acceptance and recognition by adults is the importance and value of their contribution to community service. Not only should adolescents have frequent opportunities for social service, and quite a number of high schools have been participating in the work of village uplift and community development, but their contribution, however modest, should be publicly recognised and commended. The press should highlight students' participation in such service, for adolescents are a great national resource and their normal growth and integration into adult society through such recognition is a responsibility of all concerned.

Nearer home adolescents should be helped to understand that education itself is a great social service and it is their individual and national responsibility to help its success and efficiency. Every now and then school authorities should draw the attention of students to the importance and value of education

in a secular democratic republic, should share with them the task of administration and discipline and give them opportunities to understand the teachers' work. Not only should they run and organise co-curricular activities under the direction of their teachers but also help to maintain discipline. The experiment of bringing offenders before a students' *panchayat* or of organising a students' day when the whole work from the headmaster to the peon is done by students will give students a taste of responsibility, a breath of self-confidence and a glimpse into the working of an important social service.

Lastly in the final stage the adolescent has to select a career and form an outlook concerning it. The economic realities of life force on him the necessity of supporting himself and securing a job is an effective way of becoming economically independent. Work and economic independence give status to an individual for it makes him and others feel that he has a significant role to play in the community. But this is a difficult stage for in most cases there is a wide gulf between aspirations and ambitions on the one hand and achievements on the other resulting in a sense of inadequacy, inferiority and frustration. In several cases the choice of vocation is not correct or suitable leading to waste, inefficiency and unhappiness. An important function of the secondary school is to guide students in the choice of courses, to help them to understand and assess correctly their own abilities, aptitudes and interests and to give them information regarding occupational opportunities available. This responsibility for guidance is not just a question of fitting individual pupils into the right job but involves detailed

and systematic study of the interests, aptitudes and abilities of pupils and collecting information about vocational opportunities, analysing the nature of work involved and advising preparation for success in the job. Effective guidance will bridge the gulf between aspirations and achievement and facilitate the vocational adjustments of adolescents. And high schools cannot escape this responsibility for guidance.

Thus secondary education aims at the all-round development of the adolescent and prepares him for life in a democratic society. High schools should provide experiences which strengthen democratic attitudes and give insight into vocational, political and economic aspects of life and society. Such experiences will no doubt contribute to mental development and also facilitate happy and effective adjustments to society into which the adolescent is soon to be absorbed and in which he has to seek security, success and happiness.

CHAPTER III

THE MULTI-PURPOSE SCHOOL

TO REMEDY the defects of the prevailing system of secondary education and to fulfil some of the aims and purposes outlined in the last chapter, the *Secondary Education Commission Report* has recommended among other things the establishment of multi-purpose schools, and the Central Ministry of Education has drawn up an ambitious programme of converting a large number of high schools into multi-purpose schools. In this book we are going to study some of the problems, programmes and activities of such schools and suggest some measures for their successful working.

The need of multi-purpose schools arises from two main considerations:

1. The country is committed to planned development of every aspect of national life—economic, industrial, social, political and cultural and there are increasing numbers of jobs awaiting to be done by individuals with special training and understanding. The demand for a large variety of specialised training and understanding can be met only by a large variety of training and educational courses. Educational opportunities have therefore to be largely diversified.

2. The range of individual variations among pupils is very large. While psychology has been studying the causes of such variations, the rapid growth of the school populations has accentuated the problem of adapting curricula to the varying needs, interests and abilities of all pupils. Education has also to consider that during adolescence interests and abilities begin

to be differentiated and pupils develop special aptitudes like musical, artistic, mechanical, linguistic, motor or mathematical ability. These must have opportunities for training and development and high schools must provide for a large variety of courses suited to the needs, abilities and interests of pupils.

The *Secondary Education Commission Report* is quite clear and emphatic on this point. 'In view of the fact that education up to the age of 14 has been made free and compulsory under the Constitution, students with a very wide variety of talents will be seeking education in future. This postulates that our secondary schools should no longer be 'single-track' institutions but should offer a diversity of educational programmes calculated to meet varying aptitudes, interests and talents which come into prominence towards the end of the period of compulsory education. They should provide more comprehensive courses which will include both general and vocational subjects and pupils should have an opportunity to choose from them according to their needs.'¹

Therefore diversified courses should be introduced and provided in multi-lateral or multi-purpose schools. 'A multi-purpose school seeks to provide varied types of courses for students with diverse aims, interests and abilities. It endeavours to provide for each individual pupil suitable opportunity to use and develop his natural aptitude and inclinations in the special course of studies chosen by him. The main advantages claimed for it are:

(1) It removes all invidious distinction between students preparing for different courses of studies,

¹ *Secondary Education Commission Report*, p. 36.

breaking down the sense of inferiority that is associated with vocational subjects and makes it possible to plan the educational system on a truly democratic basis.

(2) It provides greater variety of educational media and thereby facilitates proper educational guidance in the choice of studies.

(3) It helps to solve the problem of the wrongly classified pupil, because transfer within the same school is easier to arrange than transfer from one school to another.¹

It is not intended that all high schools be of this type. Nor does the diversification of courses and the introduction of many practical subjects at the secondary stage mean that something called 'general' or 'cultural' education is to be provided for one group of students, while others are to be given a narrow 'practical' or 'vocational' or 'technical' education. Rather it is understood that the intellectual and cultural development of different individuals takes place best through a variety of media, that the book or the study of traditional academic subjects is not the only door to the education of the personality and that, in the case of many children at least, practical work intelligently organised can unlock their latent energies much more successfully than the traditional subjects which address themselves only to the mind or worse still, the memory. 'If this principle is clearly understood by educationists, they will see to it that these various courses are accorded priority of esteem and students are helped to select them with due regard to their natural interests and talents. In view of the fact that they have all to be trained in certain basic ideas, attitudes and apprecia-

¹ *Secondary Education Commission Report*, p. 37.

tions, which are essential for playing the role of intelligent citizens in a democracy, there should be a certain common core of subjects of general value and utility which all students may study. But the wise teacher should realize that the other practical subjects can also contribute, provided they are taught, to the all-round education of the students, making them productive, co-operative, well-balanced and useful members of society.¹

Certainly in view of the differentiation of interests and abilities with the onset of adolescence there was a serious lag in the old unilinear curriculum which the multi-purpose school seeks to remove. But there are two important points to be borne in mind. In the first place differentiation should be considered not so much as a curricular problem as one of adapting methods to the abilities and aptitudes of the pupils. The problem of the education of the adolescent should be viewed as a whole and not merely as one of adding new types of schools or courses while leaving other things undisturbed. If differentiation is thought of in terms of methods of instruction instead of the content of education changes in textbooks, teacher preparation and class-work would be inevitable. Secondly, although in the multi-purpose school, the danger of differentiation at the cost of common general education for all has been avoided by the provision of core curriculum; yet there is no guarantee that this diversification of courses will not become too rigid and lead to stratification and water-tight compartments of subject-groups as had happened in the intermediate stage. But of this more later.

¹ *Secondary Education Commission Report*, p. 37.

It may also be relevant to point out at this stage that the provision of diversification of courses in multi-purpose schools is an extension of the democratic ideal in education which demands equality of educational opportunities for pupils of varying abilities and needs. But is the degree or extent of diversification provided at present considered adequate to meet all types of pupil needs, abilities and interests? The question should be left open.

Finally it looks very commendable, as the *Secondary Education Commission Report* claims, that the multi-purpose school should remove all invidious distinction between students preparing for different courses and break down the sense of inferiority that is associated with vocational subjects, thus placing the educational system on a truly democratic basis, but when students of a wide range of abilities and needs are placed under the same school it may breed mediocrity and the brighter and abler pupils may be pulled down to the average. Democratic attitudes are encouraged and cultivated by experiences and activities which it is the function of the school to provide. They are not necessarily the outcome of placing people of varying needs and interests together. How the school functions and what spirit inspires its programmes and group life is far more important than what pupils it admits and what grouping of subjects it offers. Psychologists suggest that only pupils of I.Q. 110 and above should be admitted to such schools but this is a very far cry under present conditions in our country.

I

Let us consider the curriculum proposed for the

multi-purpose schools. The Report notes that there has been a 'strong and persistent criticism of the existing secondary school curriculum' and that it is narrowly conceived, is bookish and theoretical, fails to provide for practical subjects, does not cater to the various needs and abilities of adolescents, is dominated by examinations and does not include technical and vocational subjects. All these have been dealt with at length in the first chapter.

The curriculum envisaged by the Commission is as follows:—

- A. (1) Mother-tongue or Regional language or a composite course of the mother-tongue and a classical language.
- (2) One other language to be chosen from among the following:
 - (a) Hindi (for those whose mother-tongue is not Hindi)
 - (b) Elementary English (for those who have not studied English in the middle stage)
 - (c) Advanced English (for those who had studied English in the earlier stage)
 - (d) A modern Indian language (other than Hindi)
 - (e) A modern foreign language (other than English)
 - (f) A classical language.
- B. (1) Social Studies—general course (for the first two years only)
- (2) General Science including Mathematics—general course (for the first two years only)

C. One craft to be chosen from the following list
(which may be added to according to needs)

- (a) Spinning and Weaving
- (b) Woodwork
- (c) Metal work
- (d) Gardening
- (e) Tailoring
- (f) Typography
- (g) Workshop practice
- (h) Sewing, Needlework and Embroidery
- (i) Modelling

D. Three subjects from one of the following groups:

Group I (*Humanities*)

- (a) A classical language or a third language from A (2) not already taken
- (b) History
- (c) Geography
- (d) Elements of Economics and Civics
- (e) Elements of Psychology and Logic
- (f) Mathematics
- (g) Music
- (h) Domestic Science

Group II (*Sciences*)

- (a) Physics
- (b) Chemistry
- (c) Biology
- (d) Geography
- (e) Mathematics
- (f) Elements of Physiology and Hygiene (not to be taken with Biology)

Group III (*Technical*)

- (a) Applied Mathematics and Geometrical Drawing
- (b) Applied Science
- (c) Elements of Mechanical Engineering
- (d) Elements of Electrical Engineering

Group IV (*Commercial*)

- (a) Commercial Practice
- (b) Book-keeping
- (c) Commercial Geography or Elements of Economics and Civics
- (d) Shorthand and Typewriting

Group V (*Agriculture*)

- (a) General Agriculture
- (b) Animal Husbandry
- (c) Horticulture and Gardening
- (d) Agricultural Chemistry and Botany

Group VI (*Fine Arts*)

- (a) History of Art
- (b) Drawing and Designing
- (c) Painting
- (d) Modelling
- (e) Music
- (f) Dancing

Group VII (*Home Science*)

- (a) Home Economics
- (b) Nutrition and Cookery
- (c) Mother Craft and Child Care
- (d) Household Management and Home Nursing

E. Besides the above the student may take at his option *one* additional subject from any of the above groups irrespective of whether or not he has chosen his other options from that particular group.

A number of committees at the Centre and States have discussed the curriculum and arrived at the conclusion that under A they should have only three languages, the regional language, English and Hindi or another in place of Hindi if it is the regional language. The subjects under A, B and C are the 'ccre' subjects to be studied by all as they provide general education which every citizen must have. The other seven groups cater to the special needs and aptitudes of students.

In suggesting this curriculum the Commission had three considerations in view :—

(1) Special abilities and interests of the pupils begin to take shape at about the age of 13 when they finish their Middle school and the curriculum in the High school should be framed on the basis of these abilities and interests, providing a fairly wide latitude of choice.

(2) For a large majority of pupils secondary stage is the final stage of education. Since it is during this stage that the adolescent begins to form vocational plans and perspectives, a provision should be made for some training which 'though not vocational' must give a vocational bias. He will need general education to discharge his duties as a human being and a citizen but he will also need some preparation for a vocation so that with more training in special institutions he may become an efficient worker. This pre-vocational preparation which elective subjects will provide will also add to his general education and understanding.

(3) Since Basic education up to the age of fourteen has been accepted as a national responsibility a number of pupils from Senior Basic schools will seek admission to High schools. Therefore it is advisable that at least during the period of transition the High schools should in their first year follow the general pattern of courses in the preceding stage and that differentiation should come in the second year.

The Commission has made two important observations regarding this curriculum which must be very clearly understood. In the first place the provision of a variety of courses to give wide latitude of choice is not to be treated as specialisation in the narrow sense of the term. 'Its primary object is to provide suitable scope for the development of the special interests of pupils. Specialisation, on the other hand, implies exclusiveness of interests which is rightly condemned at too early an age.'¹ Secondly different subjects in the curriculum should be integrated. 'The need for developing an integrated course is so great that instead of allowing pupils to choose from a very wide range of options according to their individual inclination, we have referred to group subjects under certain broad headings in order to allow for some amount of integration and correlation.'² Obviously the Commission could not go into details regarding integration of curriculum but since it is a very important trend in education it would be worthwhile examining it further.

II

The old idea of curriculum as a list of subjects

¹ *Secondary Education Commission Report*, p. 85.

² *Ibid.* p. 86.

has been given up. Today the curriculum is conceived on a much broader plane. While some would like to define it as our entire social heritage, others give it a more realistic definition to include all pupil activities and experiences which the school offers and directs, the complete school environment including not only courses of study and textbooks but also all the learning experiences and activities in relation to teachers, other pupils and school equipment and facilities. Thus, though subjects are still the heart of the curriculum, co-curricular activities are given a place of honour in the school work and are considered as important.

This means that though courses and syllabi may be laid down by education authorities each school shall have to construct its own curriculum in the light of resources available in that school. Of course the syllabi will provide the starting point but committees of teachers will have to build and develop a curriculum in terms of lessons, textbooks, aids to be used, projects to be undertaken, the relation of classwork to activities outside, and group discussions and experiences to be provided. This will entail a lot of exploration and experimentation, trying out new ideas and resource units, discussions and files containing notes and suggestions for others. Audio-visual aids, library, discussion groups, projects and instructional material all will have to be organised and developed into a well-knit programme. When this happens the curriculum will no longer be 'a rope of sand' but a dynamic, functional thing changing and growing with the changing and growing needs of the pupil and the socio-economic structure in which he is placed.

Now the question arises: what are the basic principles

on which this organisation of the curriculum should be done? In the first place the curriculum should be elastic and flexible, not rigid and stereotyped, so that it can be revised in the light of new experiences and changed conditions. Secondly it should be articulated with the curriculum in the preceding stage so that there is no gap between the primary and the secondary school. One way of doing it is to study closely the curricula obtaining in schools from which pupils are generally drawn but perhaps the best way of doing it is to examine and analyse the achievements of new entrants through detailed tests. Thirdly the curriculum should be integrated. This integration should be done at three points. In the first place it should be integrated with the needs, interests and abilities of pupils. Diagnostic and achievement tests will reveal special talents and disabilities of pupils as well as the range and extent of individual differences. Curricular requirements should keep these in view, otherwise not only will they lead to monotony and boredom which is fatal to effective learning but also breed frustration and defeatism among pupils. Of course there are 'broad areas of knowledge, skill and appreciation' with which all pupils must come into contact but even here too the approach can be adapted to the level and interests of pupils. The school, the teacher, the curriculum, educational aids and facilities exist only for the pupil. He is the educational consumer and if his needs and interests are not catered to, the entire purpose of education is defeated. This is what is meant by 'psychologising' education, that is, accepting that there are large differences in the needs and interests of pupils, and that they learn best when they have a worthwhile purpose or goal to realise

and when they realise it through their own effort and activity. The curriculum should provide enough opportunity for self-activity.

Secondly the curriculum should be integrated with social needs. Not only should there be facilities for pupils to come into contact with some of the important activities of the community but also important changes in society and civilization should be reflected in the curriculum. For example, India is a secular democratic republic undertaking huge plans for industrial and economic development. Pupils in secondary schools should not only know the facts and figures of our development projects but should also visit them, and classwork should be related to them. In a number of progressive schools pupils have built models and charts of some of these projects. This has not only added to their knowledge but also inspired them with a new hope and pride for their country. Similarly secular and democratic approach can be practised in the programmes and activities of the school by teachers, managers and pupils so that the school may function as the nursery of secular and democratic ideas and attitudes.

Thirdly the curriculum should be integrated from within. It should not be split up into a number of isolated, unco-ordinated water-tight subjects. Rather these subjects should be unified into broad areas of knowledge, their contents should be inter-related and instructional materials should be presented in the form of 'units of work'. History, geography, economics and mother-tongue or science and mathematics can be easily integrated. A number of subjects in geography have a social background, historical development and

economic importance and everything taught in any subject can easily be related to topics in other subjects and written work can be turned over to language teachers for marking the quality of expression. Scientific discoveries and inventions have led to social and economic changes and influenced the course of history. But such an organisation of the curriculum does not work merely on the strength of carefully arranged contents of different subjects. Rather its success depends on the approach and techniques of the teacher. If the teacher has an outlook wide enough to transcend the narrow bounds of the so-called subjects and can see his teaching material from the point of view of its value and meaning in practical life, if he can co-operate with his colleagues in building units of work and if his approach is dynamic, he will for ever be cutting across various subjects and reaching new bases of integration. Before that happens our pattern of teacher training and methods of evaluation will have to undergo a radical change.

This means that curriculum planning is not one man's job. It should be the joint responsibility of a number of teachers who have an insight into the needs and interests of pupils, the conditions and trends of our socio-economic order and extension of subjects into other fields of knowledge.

Finally the curriculum should be so built and organised as to provide training in the use of leisure. Adolescents commonly develop habits of unhealthy thinking as day-dreaming, obsessions, thoughts of persecution, revenge or sex and a rich programme of social, physical and cultural activities together with facilities for reading for pleasure will wean them away

from such wasteful habits. Hobbies like photography, craftwork, collecting and the like should be a vital part of the curriculum and will serve to enrich school programmes and make the stay of adolescents in school happy and enjoyable.

III

Quite a controversy rages in the west between supporters of subject-centred and activity-centred curriculum. Though experience - or activity-centred curricula have not made much headway in our country and it will be some time before they find a ready acceptance in our secondary schools, since a strong plea has been made for their adoption by the *Secondary Education Commission Report* and in this book that plea has been supported, it is pertinent that readers should know the pros and cons of the two approaches.

Those who plead that the curriculum should be organised into separate subjects have tradition in their favour. It is the established and accepted approach, subjects are well defined and fields of knowledge logically organised, they are easier to teach and learn, all items are definite and clear, teachers have been trained to teach specific subjects, both teachers and pupils are clear and definite about their objectives. If any change is to be made in the curriculum it is done either by re-arranging subjects, dropping some or adding others. Administration too is easy, teachers teach different subjects, have different hours fixed for each subject and classes move to different rooms for each subject. The plan has order and system about it.

Some definite portion of each subject is taught and studied in each term and the achievement and progress of pupils can be accurately measured through a system of written examinations. Then there are public examinations testing and evaluating the attainments of thousands and tens of thousands of pupils with the same yardstick of essay-type question papers. It suits the colleges and universities for they can see what subjects a pupil has studied in the high school and how well he can profit by the higher course, and high school curricula have been largely determined by college and university teachers to suit their own requirements. Parents and pupils also favour this subject-centred organisation of the curriculum for it helps them to spotlight merit and weakness in any field. The mastery of the subject through textbooks and lesson notes is the main task of the teacher and the school and percentage of marks indicates the degree of success both teachers and pupils have achieved.

The value of systematising and organising knowledge into compact logical wholes cannot be discounted. It makes for better and clearer understanding and when the need arises can be drawn upon more easily. But as has already been pointed out, have we not overdone it? Are not the subjects too much compartmentalized and narrowly conceived? Human experience and knowledge is one organic whole and to divide it into exclusive pigeon-holes is to divorce it from the life situations in which it has arisen and in which it is likely to be needed. The subject-centred curriculum ignores the needs, interests and purposes of pupils on the one hand and the needs of the socio-economic structure in which pupils have to live. The charge that

it has grown bookish, theoretical, barren and artificial is not altogether unjust.

In the activity- or experience-centred approach the curriculum is organised into units of work around problems, issues and topics of interest to pupils. Learning is not merely acquisition of knowledge but also of appreciations, attitudes, skills and abilities and takes place best when the learner has a more or less concrete purpose to achieve. Logical organisation of material is not so important as the needs, interests and goals of pupils. Pupils have the freedom to select learning activities for the achievement of educational goals and their developmental needs determine this selection. The subject-matter is not treated as an end in itself but as a means to desirable behaviour changes in pupils. Experiences or activities are planned co-operatively by teachers and pupils and through group work certain socially valuable attitudes, qualities, understandings and appreciations are acquired. Clubs, excursions, discussions, readings, magazine work, essays, letters, laboratory work, singing, dramatics, problem solving, projects or any activity of physical or mental nature are exploited to teach and learn worthwhile things. This approach is psychologically sound. Learning takes place best by not what the teacher does to the pupil but by what the pupil does to himself, by self-activity and self-direction. The different subjects are fused, unified or integrated.

The activity-centred curriculum calls for a much greater effort on the part of both teachers and pupils and will do more harm than good if programmes are not very carefully planned and earnestly carried out. Its critics call it 'planless' and the charge is justified

when work is allowed to drift without proper guidance and supervision by the teachers.

The two approaches represent extremes of opinion and it is difficult to say categorically which of them is superior unless both types of curricula are tried experimentally under more or less similar conditions though W. M. Aiken, in his *The Story of the Eight-Year Study*, claims certain advantages for the activity type of organisation.

IV

What should be the duration of the course of secondary education? In the first place it depends on the period of adolescence, for secondary education has been described as the education of the adolescent. Secondly it should depend on the course of primary education of which it is the continuation. Thirdly it should depend on what period of training is considered necessary if some of the diversified courses have to be taught with thoroughness and efficiency. Fourthly the standards expected by institutions of higher training and universities should also be considered in determining the duration of the secondary course. And lastly it should not be forgotten that for a large majority of pupils high school education will be the final stage of education and they must have acquired sufficient training to discharge their obligations as human beings and citizens efficiently. Therefore a somewhat longer course than the present two years of high school education is considered very essential.

The *Secondary Education Commission Report* is quite clear that 'secondary education is a complete

unit by itself and not merely a preparatory stage; that at the end of this period, a student should be in a position, if he wishes, to enter on the responsibilities of life and take up some useful vocation. The age at which the child is to begin his secondary education and the age up to which it would be continued is, therefore, a matter of considerable importance. It is now generally recognised that the period of secondary education covers the age group of about eleven to seventeen years. Properly planned education, covering about 7 years, should enable the school to give a thorough training in the courses of study taken up by the student and also help him to attain a reasonable degree of maturity in knowledge, understanding and judgment which would stand him in good stead in later life.¹ Again universities and employers have been clamouring that the standard of new entrants is deplorably low. Therefore the Commission thinks 'that it would be best to increase the secondary stage of education by one year and to plan the courses for a period of four years, after the middle or senior Basic stage. At the same time, we realize that the total period of training required at present for higher education cannot and should not be increased, because of the large financial implications for educational authorities as well as for the students. We have, therefore, come to the conclusion—which also tallies with the view of the University Education Commission—that it is desirable to abolish the present Intermediate stage, to increase the period of secondary education by one year and to plan a three-year degree course at the University stage.'²

¹ *Secondary Education Commission Report*, p. 30.

² *Ibid.* p. 31.

Therefore the Commission is led to recommend the following new organisational pattern for secondary education 'after the 4 or 5 years of Primary or Junior Basic Education:

1. A Middle or Junior Secondary or Senior Basic stage which should cover a period of 3 years
2. A Higher Secondary Stage which should cover a period of four years.'¹

This wavering attitude of the Commission between an overall period of 11 and 12 years of pre-university education has caused no small confusion. In defence it may be argued that the Commission had to deal with a considerable diversity of organisational patterns in different States but when an all-India commission is appointed it is reasonable to expect its recommendations to be clear and unambiguous, and bold enough to cover all points of view. Now when the recommendations of the Commission are being implemented on an all-India basis it is all the more necessary that the Commission should have given a clear and definite lead. This point was mooted later on in the several committees appointed to implement the recommendations of the *Secondary Education Commission Report*, and education departments in States have been considerably exercised over it. However the following pattern that has gradually emerged at least in some States seems to be very rational.

- (1) Five years of Primary or Junior Basic Education
- (2) Three years of Middle, Junior High School or Senior Basic Education
- (3) Three years of Higher Secondary Education

¹ *Secondary Education Commission Report*, p. 31.

This will mean an eleven-year course of pre-university education leading to a three-year degree course.

It is very important that these three stages should be very carefully articulated with regard to both syllabi and programmes. The middle school stage is a preparatory stage for the multi-purpose scheme and should on the one hand serve to strengthen pupils' understanding and skill in the use of the tools of learning—reading, writing and arithmetic—and on the other to 'introduce the pupil in a general way to the significant departments of human knowledge and activity. These will naturally include language and literature, social studies, natural sciences, mathematics which have always formed part of every secondary school curriculum. But there are a few other subjects whose claims are not so freely admitted, or admitted in a grudging manner so that their position in the curriculum is regarded as ornamental or at best secondary. In this group we include art music and craft. These subjects demand expression and achievement, with as much importance in their own way as the purely intellectual subjects.'¹

In view of the fact that secondary education is being conceived as a self-sufficient stage it would be advisable to organise the six years of schooling from class six to eleven into one compact unit. It would have a unified programme and would be more economical also as teachers of several subjects in which work-load is small will have full-time work.

V

As has already been indicated the multi-purpose

¹ *Secondary Education Commission Report*, p. 82.

school has important advantages. Providing diverse types of courses to suit individual needs, aptitudes and abilities under the same roof, it facilitates transfer of pupils from one course to another without much trouble or loss. In several states they have provided that students from technical, science or commerce courses may be transferred to humanities even after one year. This try-out provision is all to the good as it helps correction of any mistakes made earlier. As the *Secondary Education Commission Report* says: 'It helps to solve the problem of the wrongly classified pupil.' Secondly it helps to remove all 'invidious distinctions' between students studying different types of courses. Prof. M. L. Jacks observes 'It will integrate the experiences of children as no other school can, and will by its very constitution become a place of social education.' Distinctions will be 'blurred in such an environment, and each will be suffused by the colour of the other', thus promoting 'the growth of that common social philosophy which, for the preservation of civilized life, must be shared alike by administrators and scientists, professional classes and directors of industry, soldiers and technicians.'¹ But Prof. Jacks has a word of caution for those who have pinned their faith to the multi-purpose school. 'On the other hand the dangers and disadvantages are no less obvious. The school may split into specialist groups, each of the many sides becoming virtually a school in itself, and disintegration, instead of being spread among a group of schools, may be concentrated within the single school and thus become more marked. This will be the more likely to happen with the inevitable growth in the size of the school: astronomical figures are quoted for the

¹ *Total Education*, pp. 34-5.

size of multilateral schools in America, where there are sometimes as many as eight thousand pupils: it does not follow that our schools need swell to such proportions, but even at the lowest estimate they would probably approach eight hundred to one thousand. It would need very little to turn such a school into a mass-production factory, and the sense of community might well wither inside its walls: wholeness can be more easily fostered where the organism is small enough and compact enough to be taken in at once.¹ Besides, if education consists mostly in the impact of personalities, in one spirit speaking to another, the disadvantage of numbers is obvious. Thirdly let not administrators, teachers or parents get away with the idea that pupils can be neatly classified in one or the other of seven courses indicated. It may be that we need other types or the concoction is wrongly brewed.

¹ *Total Education*, p. 35.

CHAPTER IV

THE CORE CURRICULUM

TRADITIONALLY subjects in the curriculum are divided into 'compulsory' and 'optional' or 'elective'. The former are required of all students and the latter of certain groups of students or of those who care to study them in addition to the regular number of subjects prescribed. But with the emerging concept of interpreting curricula in terms of pupils' needs and interests, curricular offerings have been divided into those which cater for common needs and interests of all students and those which provide for special aptitudes and abilities. The subjects required of all, such as mother-tongue, English, social studies, general science and mathematics, are called the 'core' curriculum. But the term 'core' should not be given a final and fixed meaning for our basic approach to the curriculum is to be dynamic and we are to plan in terms of changing needs in an ever-changing environment. It should grow and develop with our growing consciousness of the needs and problems of education. We may, however, indicate some of its essential characteristics.

1. We may call it 'core' curriculum, general education or common learnings because it consists of learning activities and experiences which are designed to meet the common basic needs of all students. That is why subjects included in the core curriculum are required of all students. They are the 'constants'.

2. Subjects in a core curriculum are integrated into units of work or instruction. Learning experiences

cut across the traditional boundaries of subjects. This can be done in two ways:

- (a) The content of the core curriculum should be conceived in terms of problems — personal, social, civic and economic problems which are of vital concern to all pupils.
- (b) The several subjects in the core curriculum should be combined in varying degree to suit the units of work undertaken. Language and social studies, general science and mathematics can be easily integrated in a functional approach.

3. Core curriculum should provide ample opportunities for group work. Teachers and pupils can plan together, help each other in carrying out that plan and evaluate their success.

4. It is in the core curriculum that guidance and counselling can be done incidentally and effectively.

But all this is not easy at present. Teachers in secondary schools are conditioned to 'subjects'. They think and teach in terms of subjects, they themselves were taught through subjects, they have been trained in subject methods and have specialised in the teaching of two or more subjects. It is not easy for them to adapt themselves to the new approach without an effective in-service content-cum-method training course.

The core curriculum can be best handled by a teacher of sound general education. He may have specialised in one field but he must be fully conversant with where and how his field is related to practical activities or to other subjects.

Most new ideas in education fail for want of understanding and active sympathy on the part of teachers

and parents, the lack of suitably trained teachers and of suitable reference materials and equipment. All agencies connected with the new scheme of secondary education should strive to fill this gap at the earliest.

Lastly the success of the core curriculum depends on a wide variety of suitable reading materials in the school library. Teachers and students in our secondary schools are accustomed to rely too much on textbooks whose content and approach are restricted, and whenever any new idea is introduced the only difficulty generally stressed is that of the lack of textbooks. 'How can we teach general science or social studies without suitable textbooks?' is the general outcry. One may think that the only function of the teacher is to teach textbooks. Textbooks 'particularly of the present pattern' hamper the working of desirable units of work or activities.

The several committees set up at the Centre and in States have drawn detailed syllabi and suggested the organisation of curricula into integrated or correlated units of work but they have not offered illustrative examples. With so many subjects introduced into the curriculum and the syllabus to be completed in the course of 28 hours per week in 200 days, the teacher's task has become well-nigh impossible and the headmasters are experiencing real difficulty in framing timetables and allocating periods to each subject — three languages, social studies, general mathematics, general science, craft and elective subjects with laboratory work in sciences. If subjects in the core curriculum were correlated or integrated it would be possible to do greater justice to them in less time. The Secondary Education Commission is very emphatic about the

need and importance of such integration. 'It is the lack of such integration which makes the curriculum open to the criticism of being disjointed and overloaded.'¹

Another advantage of integrating the core curriculum and organising it into units or projects of work is that it can be adapted to individual differences among pupils.

We will now turn to the several subjects included in the core curriculum and discuss the objectives and methods of their teaching in a general manner.

I

The mother-tongue is the most important subject though it is not always so considered. It is the medium through which all other subjects are taught and often success in other subjects rests on proficiency in the mother-tongue. It is used in all activities of life, social, cultural and vocational. It has greater social usefulness than any other subject and in its three forms — speaking, reading and writing — is both a tool subject for learning and self-expression and a means of enriching life through literature, conversation, debates, journalism and dramatics. It is more intimate and personal and no teacher of the mother-tongue can avoid dealing with the hopes and dreams, the needs and problems, the aspirations and values and the past experiences of students. It is not surprising, therefore, that most students feel more at home with the teacher of the mother-tongue and knowing them more intimately as he does, he has more opportunity to

¹ *Total Education*, p. 36.

help students to form opinions on social and economic problems and to function as their guide and counsellor.

But such potentialities of the teaching of the mother-tongue are largely unrealized. One has only to visit any high school to find that the teacher of the mother-tongue enjoys a lesser status, is probably untrained and takes his work for granted, and that students consider it an easy and dull subject in which they can do well with a little effort. Class-work is mechanical and monotonous consisting mostly of vocabulary, idioms, explanations and writing of essays with a gulp of grammar at intervals. There are practically no adventures in self-expression, nothing unorthodox and creative. Nor is there any attempt to utilize community resources like the newspaper, radio, dramatics, library, authors and poets. Very few teachers ever present a humorous article or an interesting story in the classroom and if there is a school magazine, drama club or debating society, seldom is their work born out of classroom situations or connected with them.

In Indian languages there is a tendency to measure proficiency in terms of vocabulary alone and heavy ponderous expression is considered a sign of scholarship. Language which is a tool for clear and accurate thinking becomes a means of glossing over the absence of thinking. The mother-tongue can be used more accurately and quickly to express thoughts and meanings, and facility and speed in oral and written expression materially contributes to social and vocational success.

Our approach to the mother-tongue in India is vitiated by fanatical purism and rigidity and there is a cold war among scripts and languages in the country. There is a general prejudice that our language is the most

highly developed in the country and all other languages are inferior, and if it is accepted as a national or State language it is supposed to give us power or control over others. It is wrongly supposed that a language can grow and develop at the expense of other languages. These ideas are so widely and irrationally held that they have affected our methods of teaching the mother-tongue and the teacher's approach. It is considered necessary therefore to emphasise the following general points:—

(a) A language is a living and growing phenomenon. It grows with the people who use it and has no value or reality apart from its use by people. As society or region in which it is used grows, so does the language. Indian languages are now finding a fertile soil after independence and are growing rapidly through wide and increasing use in varying situations assimilating from other languages and enriching their own stock. If a language is less developed it is because it is less used and to expect it to grow and develop before it can be given a position of importance is to put the cart before the horse.

(b) Grammar is not a system of prescriptive laws for the use of language. It only describes what are the commonly accepted forms of expression. Correct usage is more important than knowledge of formal grammar. If language is growing so is its usage, and grammar only describes what is correct usage. Just as rules of a game are best learned by actually playing so also rules of grammar are best learned by practice in expression. As words have no meaning apart from the sentence the unit in teaching grammatical forms should always be the sentence.

(c) Literature should be adapted to the level of mental and moral development of the students and stress should be laid on a wide rather than intensive reading so that the study of literature becomes an adventure of self-discovery and the young people come to know in what direction their interests lie.

(d) Literature should be taught to broaden understandings and interests, to develop appreciations of the cultural tradition of the region and the country, to cultivate a taste for reading for pleasure and to promote an understanding of the social dynamics.

The teaching of the mother-tongue must take into account the needs of pupils, the nature of the society and the peculiar nature of the language. Usually teachers of languages have been concerned exclusively with the last and have ignored both the needs and interests of pupils and the social significance of language ability, nor have they utilized the resources available in the social environment for their work in the classroom. Let us lay down some general principles which should govern and guide the teaching of languages in our new high schools.

(a) Pupils should be helped to understand the social significance of language ability. Language is a means of self-expression and communication, of establishing personal contacts with fellow-citizens and holding interesting conversation, of understanding people and their ways of thinking, of presenting our thoughts and opinions, of bargaining, persuasion and striking business deals, in short of social and vocational success in a democracy.

(b) The teaching of the mother-tongue should keep in view the needs of pupils and society, and should provide

opportunities for acquiring skill in those activities which are essential to social life, formal lessons in grammar and composition, in vocabulary and syntax, should be replaced by discussions and conversations, letter-writing and reporting of group activities, dramatics and dialogue-writing, and holding interviews. Discussion of news items, political events, new books and articles, social movements and people in the public eye will make for enjoyable conversation, and discussion of issues will stimulate inquiry, research, analysis, criticism of other people's point of view, marshalling arguments in support of one's own and reviewing the position. If the teacher is conscious of these objectives, opportunities will frequently present themselves for such oral activities. In any effective learning of language oral work is the best foundation.

(c) The teaching of the mother-tongue should cultivate among students an abiding interest in reading. Reading at the high school stage is very important because it is through reading habits and skill that proficiency in other subjects is acquired. Training in good study and reading habits is sadly neglected and each teacher should share with the teacher of the mother-tongue the responsibility of teaching pupils how to read and study. The school may organise 'how to study' courses through proper display of reading materials and frequent informal visits to the library stimulate and guide reading interests and give such opportunities and guidance as will improve general study habits but it should not be forgotten that one of the major aims of schooling is to cultivate such effective habits as will lead to both comprehension and speed in reading and study. In fact much of the pupil failure and

maladjustment in school can be attributed to poor study habits.

(d) The mother-tongue should be taught in secondary schools in close relation with all other subjects in the curriculum. No doubt different subjects are taught by special teachers but since proficiency in the mother-tongue which generally is, and ought to be, the medium of instruction and examination, affects proficiency in other subjects, responsibility for it should to some extent be shared by all teachers. In fact every teacher should be a teacher of the mother-tongue and teachers of other subjects should frequently meet the teacher of the mother-tongue to discuss generally the progress of the class in written and oral expression. There may be some students whose knowledge of content is good but who are not able to score high because of the poor expression. Such cases can be attended to by the language teacher for remedial work.

(e) In view of the great importance of reading habits students' inability to read should be seriously considered and carefully diagnosed. Causes of students' inability are numerous and varied and students differ in regard to their study habits and reading difficulties. Therefore diagnosis and remedial work must be done on individual basis.

Let us analyse some of the specific objectives in teaching the mother-tongue. They are speaking, reading and writing which may be further analysed.

I. Speaking

- (a) Conversation, informal and formal
- (b) Discussion, planning a programme or a trip

- (c) Explanation of a difficulty or a point of view
- (d) Speaking before a class or an assembly
- (e) Debating a point informally in the class or taking part in school debates
- (f) Declaiming a set speech or reciting a poem
- (g) Rendering a part in a drama
- (h) Telling a story as one of its characters

II. *Reading*

- (a) Reading aloud to others a news item, an interesting passage, a humorous article or a report
- (b) Play-reading in a group
- (c) Reading silently to collect information
- (d) Reading a story, poem, drama or essay for pleasure

III. *Writing*

- (a) Personal letters
- (b) Descriptions in the scrap book
- (c) Reporting a meeting
- (d) Business letters
- (e) Creative writing, making up a dialogue or writing an article for the school magazine.

The mother-tongue can function as a unifying force in the curriculum. In every field or area of teaching and learning, the use of language is unavoidable and new words and expressions are acquired and practised and these facilitate comprehension and further study.

II

The objectives of the study and teaching of English in Indian high schools have always been ill-conceived

and confused. On the one hand they have been involved in a maze of grammatical forms to be learned for their own sake and on the other they have leaned heavily towards a knowledge of western ways and thoughts. High school students indulged in grammatical hair-splitting over parsing of words and classification of clauses, they could detect common errors in English and recite poems and paraphrase them, but they could not carry on simple conversation on a common subject, write a straightforward letter or even draft an application for employment. Perhaps the whole approach in teaching English was vitiated by a policy laid down half a century back in which the teaching of English at the high school stage was governed by the standards and methods obtaining in colleges and universities. However, after Independence the place and function of English in our national life is in the process of re-assessment, and has become extremely controversial.

On the one side national sentiment and self-respect demands that English should be altogether banished from the country and should be used and learned as an important foreign language for international communication and for imbibing western thought, science, technology and culture. For the emotional integration and political unification of our country it is considered imperative that one of our own languages should be the medium of inter-state communication and developed as a national language. It has looked odd that the Russian, Chinese or Japanese visitors to this country should tell Indian guides to talk in Hindi which they understand or for which they have an interpreter, that outside India Indians should hold personal conversation in English or that they should

write home to their people in a foreign language. Besides the widespread use of English has created a wide gulf between educated and uneducated or half-educated classes so much so that an educated Indian seems to have more in common with an Englishman than with his uneducated countrymen. On the other hand it is maintained not without justification that our national renaissance, national unity, cultural and scientific progress has been due mostly to our study of English by which we have drunk deeply of western thought, science and culture. Our national consciousness was aroused by the impact of western political ideas and our leaders in all areas of thought and life drew much of their inspiration from their study of English literature. English is 'the major vehicle of modern scientific civilization' and without English our future progress in science and culture is sure to be restricted. Even though one may concede that the argument of our debt to English is not overdone one cannot baulk the fact that there are nations like Japan who have made phenomenal progress in science and technology without leaning so heavily on English. Then there is no regional language so well developed as to replace English in administration, law courts and inter-State communication. Also there is an important minority whose mother-tongue is English and there are important regions and communities who do not like the regional language selected to replace English. Finally the use of English for over a century has created vested interests in English and they are threatened by the replacement of English. The place and importance of English has already suffered, it is no longer the sole medium of instruction and examinations.

While this controversy continues to rage, the educational issues involved have been obscured and relegated to the background. For us the important questions are: What are the objectives of teaching English in India? For how long and how much English should be taught in secondary schools? What should be our approach or methods in teaching English? And what kind of reading material should be provided? As things are English still has a privileged place in our life and education. It is the language of the Central Government, the Union Public Service Commission, High Courts and the Supreme Court; it is the language of big business; and it is the medium of instruction at the university stage. Therefore a proper foundation in English has to be laid in the secondary schools so that students may acquire sufficient proficiency. Some universities have adopted the regional language as the medium of instruction and examination but even then a number of students will take up research or go abroad for higher studies and will need a sound knowledge of English. It may be objected that only a small number of students pursue higher courses and a foreign language should not be made compulsory for them. The Secondary Education Commission has met the objection admirably. 'It is difficult at any stage to determine with any degree of certainty those who can proceed to higher education and those who cannot. Nor can it be suggested that a particular group will not be in a position to take to higher education at a particular stage of study. In view of these difficulties it is suggested that no student should be handicapped by ignorance of a language which will ultimately determine the career that he should choose.' Further 'it should also be

recognised that even in regard to many of the diversified courses of instruction as matters stand at present, a knowledge of English will be extremely useful for understanding the subject better and for further study of the same subject.¹

All this leads us to the inevitable conclusion that provision for the study and teaching of English should be made in every secondary school and facilities should be made available at the Middle School stage for its study on an optional basis. English will continue to be studied and taught at the secondary stage but only as a foreign language, for comprehension and not for self-expression, as a skill subject, 'and not as a content subject requiring the initiation of children into the niceties of formal grammar and the beauties of literature.' Besides the secondary stage is now being conceived as a self-sufficient stage and it must try to meet only in a general way the needs of the various courses and careers open to its products. The standard of English should be such as will lay the foundation for its general use and for further intensive study. Experts who have studied the problem with reference to these objectives are of the view that, for a working knowledge of English, students should have a mastery over about 250 basic structures and a vocabulary of about 2500 words. Such a course should be arranged in two units of three years so as to provide a self-contained course for six years at the secondary stage.

Here is a sample of the syllabus issued by the Board of Secondary Education to schools in one of the States—

English is to be treated as a skill subject and not as a content subject. The aim should be confined to

¹ *Secondary Education Commission Report*, p. 71.

teaching pupils simple, straightforward English. The guiding principles should, therefore, be:

- (1) The establishment of an oral foundation before reading is started;
- (2) Vocabulary control;
- (3) An approach through structures as opposed to an approach through vocabulary items only;
- (4) Selection and gradation of structures on the basis of their productivity, simplicity and teachability;
- (5) Stress on teaching only one item at a time and moving on to the next item only when the first has been thoroughly established;
- (6) Use of the learner's mother-tongue to be reduced to a minimum, resort being had to it only for comparison of structures with English for clarifying (incidentally) the meaning of a word that can best be made clear through the use of the mother-tongue.

The implications of the above for purposes of teaching the English language in India are given below:

- (1) The whole syllabus covering a period of six years (11 plus to 17 plus) should aim at a complete mastery (understanding, speaking, reading and writing) of a 2000 word vocabulary, and of the phrases and idioms commonly associated with these words.

Such lists are available.

- (2) In the learning of a foreign language, mastery of structure is more important than acquisition of a vocabulary. The limitation inherent in the study of English due to lack of natural incentive,

restricted number of periods for teaching and grammatical difficulties can be overcome only by intensive drilling in structure patterns.

Lists of such structure patterns are available.

- (3) Suitable text-books, Supplementary readers and Teachers' Guide books need to be prepared along these lines. It will be an advantage if Readers of a set are prescribed for use in successive classes for both intensive and extensive reading.
- (4) It is assumed that at least six periods per week will be given to the teaching of English at this stage.

These structure syllabuses are the outcomes of the application of modern techniques of linguistic analysis to the problems of teaching and learning languages. It is hoped that basic structures of English thus defined will make for economy of time and effort and eliminate wasteful learning. Apart from drill in basic structures, as Mr. J. G. Bruton suggests, 'the teacher must provide a great variety of learning situations for the spontaneous use of what has been learned.' It may be feared that vocabulary control and well-defined structures will make the whole programme rigid and narrow, restricting the teacher to the schedule and eliminating individual variations in vocabulary. But such a fear is not justified because the approach seeks to emphasise the minimum essentials rather than prescribe the maximum limits.

In the several meetings in which these ideas have been discussed with teachers of English, one important question has always loomed large: Will the examiners

keep them in view? While so much stress is being laid on teacher training in the new techniques the examiners should also be made conversant with new objectives and objective testing techniques.

III

The value and importance of mathematics in social, economic, scientific and technical fields has never been disputed but quite a large number of people believe that it has very little place in the life of an ordinary person and that it should not be made obligatory for all as has been done in the multi-purpose schools. 'You wish to provide diversified courses to suit individual needs, aptitudes and interests and yet you have made elementary mathematics a part of the core curriculum to be studied by all. You propose to teach to all square root, quadratic equations, geometry. But when are people going to use them? Very little mathematics is needed in ordinary life and what little is needed is being taught in lower classes.' This was an angry question posed in a teachers' meeting. No doubt mathematical aptitude is not universal but mathematical competence and literacy is universally needed and with greater stress on the quantitative aspect of things in life, the value and importance of mathematical ability has greatly increased so much so that every man and woman of liberal education is expected to understand the use of quantitative data in the solution of social problems and use mathematics in daily life. If every educated man and woman is to manage his or her own affairs and to participate in the management of community life, he or she needs some

modicum of mathematical knowledge and competence. Our personal and family budgeting, our shopping with sales-tax, our insurance, income-tax and provident fund figures and the like require quick division and multiplication skill.

Mathematics is an important way of thinking and is a very useful social instrument. What will be our development plans and projects, and how can their progress be grasped if we are unable to follow numbers, symbols, charts and tables. And these are being increasingly used in books and pamphlets on social and economic development and progress. Again we have begun to think very precisely about things, we use refined instruments of measurement in industry and express our findings statistically. But our methods of teaching mathematics take us nowhere near the mathematical aspect of our life and work. If it is not taught in a setting of life experiences and activities, how can its need and importance be felt and realised? If it is taught as a game of symbols and concepts whose meaning the pupils do not understand it can have no significance beyond the game itself. Much of the unpopularity and lack of appreciation of the study of mathematics is due to defective teaching practices and attitudes in schools, and these must change if we are to benefit by the great discipline that mathematics undoubtedly is. If it is a nightmare and examination bogey for so many students the responsibility evidently is on the teachers. Let us enumerate some of these practices.

(1) Mathematics has always been taught as a skill subject in which proficiency depends entirely on drill and more drill. The teacher does a few problems and

then asks the class to do as many as they can to acquire proficiency. It means that mathematics is treated as nothing more than intellectual mechanics, the skill to calculate quickly and efficiently. Mathematics is needed in reflective thinking and helps to develop the ability to solve problems of which there is an abundance in everyday life. Of course every textbook in mathematics also abounds in problems but most of them are so remote and preposterous that the learner hardly understands their practical use. The filling of reservoirs with two taps running and one plug out, the meeting-times of ships and cars, the behaviour of the hands of a clock, the division of property in unequal ratios and the like are some of the situations in which mathematics is supposed to be useful. But would it not be better to replace them by our real life situations arising out of income-tax, water rates, insurance premia, railway fares to different places and in different classes and railway costs per mile? Significant social problems set in real life situations will invest the study and teaching of mathematics with genuine interest. It is not a collection of sums to be done but a way of thinking and solving our everyday problems.

(2) At no stage does the teacher of mathematics make any allowance for individual differences among pupils. Problems are there and all pupils must do them at the same rate. No pains are taken to help the slow and the backward pupils in understanding the concepts and the vocabulary used.

(3) There is a widespread and powerful impression created mostly by teachers of mathematics that what matters in mathematics is the right answer to sums. And answers are either absolutely right or absolutely

wrong, for is not mathematics an exact science? This approach is very unfair to mathematics and the pupils are anxious to arrive at the correct answer somehow. Little emphasis or importance is attached to the process or method of handling problems and in fact it is the method or process which indicates how far a pupil has been able to apply himself to the problem.

(4) The prevailing methods of teaching emphasise wrong or false objectives. 'If you do well in mathematics you score full marks and it will make a great difference to your division or position in the public examination.' In fact the top places in Board and University examinations are always secured by students who are very strong in mathematics. 'If you are weak in arithmetic and algebra you can cram theorems and secure a pass.' In fact geometry comes to the rescue of many who are weak in other branches of the subject. Students go on battling with algebraic symbols without understanding their significance. Seldom are they told that adding x , y and z is like adding chairs, tables and books.

(5) No attempt is made to integrate mathematics with other subjects particularly science and social studies. Now that these three form subjects of study in the core curriculum the possibilities of their close integration into units of work or experiences are very large. Life insurance would be a very interesting project. What is meant by life insurance, how insurance is effected, types of policies, calculation of premia, average span of life, actuarial work, life expectation in India and other countries, social implications of life insurance, social factors bearing on life expectation, some of our health problems, some common epidemics

in India, our health habits, birth and death rates, visit to a life insurance office, birth and death registration post and the like, will constitute a very interesting unit and has endless possibilities of ramification and elaboration yielding a large harvest of understandings and appreciations in all these fields of mathematics, general science and social studies.

The syllabuses framed have to be reconstructed but only after mathematical competence considered essential in general education has been redefined in terms of objectives and outcomes.

CHAPTER V

THE CORE CURRICULUM—(*Continued*)

THE introduction of social studies in the secondary school curricula is a recognition of the fact that education is the basis of social and cultural evolution and the school is a necessary condition of all social progress. Two factors have hastened this recognition. In the first place under the impact of industrial revolution the pattern of society is changing rapidly. Science, invention and enterprise have upset the traditional settled ways of life and work and there is a new ferment in society, new problems and tensions calling for fresh adjustments and new ideas and institutions calling in question the old values and ways. All this has made life uncertain in many respects and it seems necessary that young people should have knowledge and understanding of the new trends and the new obligations they will have to meet on growing up. Secondly the school is beginning to play an unprecedented role in society. Till recently it reached only a very small fraction of the population and in years to come it hopes to receive under its portals in unlimited abundance the entire population of the country. Its influence for good or evil will increase enormously. Besides the burden of education which to a very large extent used to be borne by parents, the family, the community, the temple or the mosque is now being increasingly shifted to the school. The school which played an insignificant role in social understanding and progress, in inducting the young people into the cultural heritage and the varied life of the community, is called upon to

shoulder the entire responsibility. There have grown more powerful influences in education like the cinema, the radio, the press and the like and the school is called upon to analyse their influence and often to neutralise if not to counteract their deleterious effect.

One of the ways to meet the challenge of difficult and complex responsibilities is to revise and reconstruct programmes of education, and social studies has been introduced in the curricula to cover the ground associated with history, geography, economics, civics, administration etc. The avowed objective is to impart knowledge and understanding of the social environment, to provide insight into social conditions and problems and 'to create the desire to improve the existing state of things.' As the *Secondary Education Commission Report* observes 'This whole group of studies has, therefore, to be viewed as a compact whole whose object is to adjust the students to their social environment—which includes the family, community, state and nation—so that they may be able to understand how society has come to its present form and interpret intelligently the matrix of social forces and movements in the midst of which they are living. They help the student to discover and explain how this adjustment has taken place in the past and how it is taking place today. Through them, the students should be able to acquire not only the knowledge but attitudes and values which are essential for successful group living and civic efficiency. They should endeavour to give the students not only a sense of national patriotism and an appreciation of national heritage but also a keen and lively sense of world unity and world citizenship.'¹

¹ *Secondary Education Commission Report*, p. 93.

Social studies are primarily concerned with human relations, with growth in social understanding. They involve thought as well as knowledge but thought always affects feeling and leads to action. Hence any programme of social studies is bound to lead to certain opinions, attitudes, loyalties etc. Social relations are interpreted in more than one way and the attitudes of parents and teachers are likely to be transferred to young people without any rational analysis or conviction. Therefore the teacher of social studies has to be very careful that he does not usurp young people's right to think for themselves. On the contrary whenever controversial issues arise he should let them decide on the basis of understanding and insight, weighing evidence for and against, instead of forcing ready-made opinions. Social studies offer large opportunities for propaganda, for uninformed and unreflective acceptance of set views on major social issues, but a wise teacher will encourage individual pupils to use their intelligence, to keep an open mind and think critically, to modify and give up opinions in the light of new evidence. Only thus can he do justice to social studies and help in the promotion of a democratic way of life.

Let us enumerate some of the major aims and objectives of social studies in general education.

1. Making society, nation and the world more intelligible
2. Giving all that information which pupils may need for forming opinions on social issues
3. Developing knowledge of civic rights and duties
4. Promoting understanding and appreciation of the democratic way of life and administration

5. Imparting knowledge of our social and cultural heritage, our past history, our present and future plans
6. Developing knowledge of the different communities which form our secular republic, their contribution to our art, architecture, literature, thought and ways of living, to our great struggle for independence and to our national stability and prestige
7. Developing an insight into the structure of our present society, caste, community, religious and regional distinctions in food, dress, ways of thinking and living
8. Promoting mutual understanding and appreciation among different classes and creeds
9. Encouraging pupils to think and judge independently and critically
10. Promoting understanding and appreciation of some of the major problems of our country
11. Promoting and strengthening a sentiment of national unity and solidarity, of love for our country and of pride in her achievements
12. Developing knowledge of social evils and backwardness and a desire to co-operate in their removal
13. Promoting objective appreciation of such agencies of social propaganda as the cinema, the radio, the press or the party demagogue
14. Developing efficient and creative citizenship of a secular democratic republic
15. Promoting the ideals of the United Nations Organisation and *Panch Sheel*

'The scope of Social Studies is the study of man in his surroundings—his ways of living, present and past, his significant achievements, his institutions and the problems he faces today.' This definition of the scope of social studies formulated at the All-India Seminar of Lecturers of Training Colleges held at Saidapet, 1957 corresponds roughly to the four items contained in the *Draft Syllabus* issued by the All-India Council for Secondary Education.¹

1. Study of the social life and administrative organization of the pupil's own locality, which should also include that of the State and India as a whole.
2. A general survey of the origin and growth of Indian civilization and nationalism in its relationship to the march of world civilizations and movements.
3. Study of social life and its organization among the chief peoples of the world in relation to both their geographical environment and historical development.
4. Significant problems of living together in the modern world which range from students' inter-personal to inter-group, inter-state and international relationships.

It may be objected that altogether too many and too high objectives have been formulated for social studies but it is natural when the subject cuts across so many fields of knowledge and life and contributes most vitally and directly to the main objectives of secondary education.

For this very reason the framing of syllabi for social

¹ All-India Council for Secondary Education, *Draft Syllabus*, pp. 14-15.

studies presents difficulties. The approach is new, the content is not well defined, the methods and techniques have not yet been developed, there is a great dearth of teaching material and the teachers do not know how to set about their work. A number of institutions have made inquiries about what books have been recommended and what sort of teachers have been appointed for the subject. There is an atmosphere of uncertainty about the subject, and a few suggestions are made here in the hope that thought and experience will build on them a rational scheme of content and programme.

In the first place it must be clearly understood that programmes and contents of social studies will vary from school to school. This may mean a bewildering statement in a country where millions study the same syllabi and books and are subjected to the same type of questions. And yet in a programme which stresses the cultivation of attitudes and qualities, of understandings and appreciations, the needs, interests and aptitudes of pupils will be the determining factor in the selection of content and activities, and these are likely to vary from region to region and school to school. Again the local environment of each school is different, the needs of the local community, the resources available in the community and the school vary and so should vary the programmes of social studies. Schools at Delhi may utilize numerous places of historical interest to understand past history and the contribution of different communities to our composite culture, or stress how modern history is being made in the proceedings of our parliament. Schools at Jamshedpur may use its steel plants as the approach to the study of industrial

development. A rural school may enter social studies through agriculture, its activities and products with varying seasons, rainfall and soil, co-operative farming, marketing farm products, the need of increasing food production, our food imports. Even within this local environment there are differences in potential learning experiences. The school near a market can develop a real understanding of the place and value of markets in our daily life and national economy. The school near a park can promote understanding of the value of parks for recreation and leisure. The school near a cloth mill can give its pupils detailed and clear understanding of its working, of its organization and of its contribution to national wealth. Thus each school will have to capitalise the distinctive characteristics and resources of its own local environment. But great care must be taken to avoid undue local patriotism and glorification of the local community. Finally some schools are deficient in such resources or have only one or two types of them. In Calcutta there are no opportunities for experiencing and understanding rural life. The social studies in such areas will have to depend largely on pictures, films, charts, books, models and trips for an understanding of such subjects for which real experiences cannot be provided by the local environment. Thus for building programmes of social studies each school will be a law unto itself.

Secondly the objectives of social studies are many and varied and the programmes should be very comprehensive so that they promote the attainment of every major purpose and cover the whole area of social experience—the family, the community, the nation and the world. There is a tendency to ignore areas which

do not touch the life of the teacher or the students. How large populations are hustled into purchasing by blatant propaganda, how nations are pushed into wars, how backward people are being exploited, the incidence of divorce in different countries, are some of the issues likely to be ignored in our schools. But comprehensiveness should not sacrifice balance. The field of social studies is very large and the programme should do justice to all items in the syllabus. Even in dealing with any one item a proper perspective should be maintained. For example in bringing out differences between racial groups, regions and nations, their similarities should also be stressed; in understanding the evils of any institution its merits should also receive due emphasis. Comprehensiveness should be achieved not only in details but also in approach. This is a subject in which teachers and students will have to make up their mind about a number of vital issues and take decisions, and unless their approach is both comprehensive and balanced the purpose of social studies will be defeated.

Thirdly in view of the large area covered by social studies the programmes from the primary to the higher secondary stage should be one progressive unified and continuous whole so that each class builds on what has been completed in the previous class and contributes to what follows in the next. Of course topics and issues of importance will have to be continually reviewed and study and experiences will have to be continually reinforced but wasteful repetition must be avoided, by organising the whole course into a carefully laid out classwise programme. No doubt education authorities lay down general outlines of the

ground to be covered in each class particularly from classes vi to xi but there is no rigidity, and as this is not a subject for public examination there is every freedom to adapt it to the needs of the institution and to build a unified continuous course right from the lower classes.

Fourthly the programme of social studies should be meaningful, related to the needs and interests of pupils and accepted by them as useful and important. To this end the several items should be carefully selected in terms of their usefulness. This is not difficult considering the vast field of the subject and the numerous points at which it cuts across our areas of life and thought.

Fifthly the programme should be made up largely by learning situations which resemble closely the problems we have to face in actual life. Working the school union with its excitement of elections, debates and responsibility, running a co-operative store with its headache of calculations, staging a play or planning a health squad brings pupils face to face with problems and issues which are genuine. Social studies aims at developing both social understanding and social behaviour and it must be taught and learnt in situations of genuine life concerns, of real and engaging social contacts, activities and experiences. Of course, pupils must read about things but that alone should not be considered enough. Direct experience with things and ideas of social significance, stimulating, varied and carefully planned social experiences and contacts like visiting a local factory, law courts, the post office or dealing with local social phenomena and issues like food scarcity, dowry system or water supply will help to develop effective understanding and attitudes as nothing else

will. But such experiences and activities should not be haphazardly chosen or mechanically conducted nor should they be repeated too often. The first experience means much, the second means less and so on till young people begin to take things for granted and show no enthusiasm.

Sixthly the programme for social studies should provide for a proper correlation with what understandings and experience pupils are acquiring in other periods of their school work. Often subject teachers work in isolation and separately but if they knew what is being done in other subjects and if work is planned in such a manner that different activities and subjects are mutually integrated, the entire programme will acquire a new meaning and purpose for both teachers and pupils and will constitute a more effective and unified attack on the problems of life in modern society. In this connection the teacher of social studies can play an important role by keeping in constant touch with teachers of other subjects, knowing what they are planning to do in their field and providing convening points for their lessons and activities. The lessons in Hindi, English, Science, Economics or Commerce can be reviewed and reinforced in social studies if they are timed together.

Seventhly programmes in social studies should be adapted to differences among individual pupils. This applies to the study and teaching of every subject but while in other subjects it means that the content and method should be modified for bright, average and dull pupils, and such modifications are justified, in social studies adjustment to individual differences calls for adaptation within each group to the distinctive needs, interests, purposes and capacities of the individuals

who make up the group. For example, a pupil who comes from a broken home where parents or uncles are involved in litigation will understand the powers of the court far more clearly than one who comes from a happy home. Again those who have a doctor, a lawyer, a merchant or a teacher in the family will have a better understanding of the social usefulness of these vocations and a wise teacher will adapt both content and method to such variations in his class.

Lastly programmes in social studies shall have to be much more flexible than they are in other subjects. Its reasons are not far to seek. The content is almost staggering covering a wide range and cutting across many fields, it may be treated in a variety of ways — discussions, reading, charts and models, trips and excursions, participation in activities and the like and there is no dread of public examination as its score will rest on internal examination. So the teacher is not hemmed in and can select his content, methods and materials on criteria of broad usefulness. He can modify them, change them or discard items as the situation demands. This flexibility will help to sustain interest of pupils and to achieve better results. A hard-and-fast outline of ground-to-be-covered or of experiences-to-be-gained will not interest everybody in the class.

Arising out of these basic principles of curricula-organization in social studies there are two important considerations which schools must keep in view. In the first place if social studies is to present a realistic knowledge of society, and since realistic knowledge cannot eschew controversial issues and differences and clashes of opinion, the teacher should have full freedom to present knowledge of such differences of views and

clashes of interest. For example, what would be India's struggle for independence if communal differences and conflicts were left out. Such debatable and debated issues as the caste system, the temple entry, vegetarianism, communal representation in services and the like cannot be avoided and any attempt to leave them out will only help to distort the picture and ignore the truth. Social studies not only deal with controversial issues but also with changing and newly emerging situations and the teacher must have a wide knowledge and grasp of the divergent opinions and beliefs held by different groups in the community. He should have opportunities for wide reading and numerous social contacts so that he acquires a broad approach to his subject.

Secondly the teacher of social studies will be a powerful influence in moulding the opinions, attitudes, beliefs, thoughts and preferences of young pupils and there is a great danger of 'indoctrination', of inculcation of a series of absolute articles of faith, of blind and unquestioning acceptance of the beliefs and opinions of others. If social studies are to develop social understanding and stimulate independent thinking about social problems such indoctrination shall have to be carefully avoided. This is not easy considering how easily young people are infected by the views of their teachers and how in any selection of content some reference to our scale of values is inevitable. Generally it is stressed that to guard against such a danger all sides of the issue should be presented, the teacher should be a judicious person or that controversial issues should be avoided. All this may help but often without knowing the teacher by mere gesture or facial expression

conveys much more than he might have through words, but if he cherishes a genuine desire to avoid such indoctrination, if he has so much anxiety to avoid forcing his opinions on his class and if he is inspired by lofty ideals, he may acquire a certain humility which perhaps is the best safeguard against extreme forms of dogmatism.

I

The introduction of general science as a part of the core curriculum to be studied by all pupils is a recognition of the important place of science in modern civilized life. So wide and varied are the applications and uses of science in modern life and so revolutionary has been its influence on society that we aptly call the present age the age of science. An understanding and appreciation of the fundamental principles of natural and physical sciences and their contribution to health, leisure, entertainment, vocational efficiency, citizenship and personal comfort is essential to effective living in the present-day world.

Broadly speaking there are two main objectives of general science. In the first place it seeks to provide a broad foundation of scientific knowledge for students who for various reasons are not taking up the science course. Secondly even for those who are offering science it will provide a general practical approach which is difficult to acquire in studying physics, chemistry or biology as separate subjects.

A brief survey of the areas to be covered by general science will help to elucidate the above.

1. General science stresses scientific approach to

life and learning, dispelling wrong beliefs and superstitions, irrational prejudices and dogmas, and popularising an understanding of the scientific attitudes.

2. General science helps the young people to understand the world in which they live and the impact of science on society. The quick and easy means of communication and transport have conquered distance and brought the whole world into our neighbourhood. The treatment of personal health and disease, the growth and development of medical science, our growing knowledge of various foods and their nutritive value, have given us protection against disease and raised our standards of health. Sanitation, hygienic water and milk supply, sewage disposal, preservation of foods, health laws and the like have improved our civic life. Large-scale production of consumer goods have brought common necessities within the reach of rich and poor. Radio, cinema, gramophone have brought high-class entertainment to our door. Homes are equipped with electricity and numerous domestic appliances. Hobbies like photography provide wholesome diversion for leisure. Gifts of science have filled our life and world and for a proper adjustment young people must know and understand them through courses of general science.
3. General science acquaints young people with great names in science, how their selfless devotion to truth led to great discoveries and inventions and how the great edifice of modern science was built layer by layer by great scientists and

savants. Such a historical treatment will help young people to understand the evolution of scientific development.

4. General science will see science not as several subjects or branches but as one great system attempting understanding of the universe and solving problems of life. For example, instead of teaching the names of parts of the body, as is done in courses in physiology, it will begin with health habits, sanitation, wise selection of food and the like. The approach is general and practical.

Obviously general science is not easy to teach. In his anxiety to cover a wide field the teacher is most likely to miss the wood for the trees. It is not *what* we teach that is of prime importance but *how* we teach it. Young people are curious about the world in which we live and the world is full of products of applied science. In explaining them the teacher should arouse and keep alive students' interest in the scientific method. The factual information he has to impart is enormous and the temptation to teach everything is so great that there is every chance of his making general science a hotchpotch of miscellaneous knowledge. Selection is the most obvious course and a few items adequately treated are more effective than a top-heavy syllabus. A few simple illustrations related to our daily life with ample attention to difficulties of experiment and observation techniques may help to convey to students some idea of the spirit of scientific inquiry and investigation which is presumably the chief aim of general science.

Nor are ordinary science graduates fully conversant

with the implications of the scientific method or posted with the history of science. And they easily succumb to the dogmatic approach of the textbook. These difficulties are real and are at present being ignored because general science does not figure as one of the subjects for the public examination but they are sure to crop up on a close appraisal of the syllabi and the methods of teaching.

II

The *Secondary Education Commission Report* recommends that every high school student should take one craft.

'We consider it necessary that at this stage, every student should devote some time to work with the hands and attain a reasonably high standard of proficiency in one particular craft, so that if necessary he may support himself by pursuing it. But it is not on economic grounds only that we make this recommendation. By working with the hands the adolescent learns the dignity of labour and experiences the joy of doing constructive work. There is no greater educative medium than making with efficiency and integrity, things of utility and beauty. It trains practical aptitudes, facilitates clarity of thinking, gives chances for co-operative work and thus enriches the entire personality.'¹

Let us indicate some of the guiding principles in craft instruction:

- (1) The craft should be chosen for its educative value.

¹ *Secondary Education Commission Report*, p. 96.

- (2) The craft chosen should be appreciated by the local community.
- (3) The craft chosen at the high school stage may or may not be the craft taken in the middle school stage by the student.
- (4) While a certain amount of mechanical skill should be insisted upon, the practical and aesthetic value of the objects made should also receive due importance. The articles made should have practical value and look beautiful. Good craftsmanship should combine both. If young people are helped to make things of their own choice, it will stimulate intellectual activity and develop aesthetic sense and to the extent to which craftwork helps both to that extent alone it will be both educative and creative.
- (5) Therefore it is not the amount of work done or the number of articles made that matters but the quality of work done or articles made.
- (6) Every student should not be engaged in the same type of activity except of course in the initial stages when some mechanical skill has to be developed. Craftwork is to provide an outlet for the expression and development of individuality, and every student should be allowed to make his own choice of things he is going to do and make.
- (7) Craftwork should always be supplemented by instruction in the choice and recognition of material, and where and how it is produced. If in woodwork students do not know the different varieties of wood used, where they come from, their comparative merit and the like, if they do not understand and appreciate the nature and quality of the material they

use, they will not be able to do justice to their work or produce a high quality of work.

- (8) The craft teacher should be both a good teacher and a good craftsman.
- (9) Visits to museums, craft centres, emporia and workshops should be frequently arranged so that students learn to appreciate good craftsmanship.
- (10) Exhibitions of students' craftwork should be an annual feature in every district or town.
- (11) A part of the sales proceeds of students' craftwork should go to students so that they appreciate the economic side of craftwork but no attempt should be made to boost it.
- (12) The moral values of craftwork should not be emphasised specifically in class teaching but should be learned by students incidentally through experiences with work and workmen. For example, dignity of labour cannot be taught but will be acquired through experience.

CHAPTER VI

THE SEVEN STREAMS

TO PROVIDE diversified courses to suit varying aptitudes and interests of pupils in high schools the *Secondary Education Commission Report* has recommended seven groups of elective subjects. Other groups may be added to the list but ordinarily, these seven groups would provide enough scope for full freedom of choice to pupils with different interests and aptitudes. They are:

- (1) *Humanities*, that is, a classical language, history, geography, elements of economics and civics, elements of psychology and logic, mathematics, music, domestic science
- (2) *Sciences*, that is, physics, chemistry, biology, geography, mathematics, elements of hygiene and physiology
- (3) *Technical*, that is, applied mathematics and geometrical drawing, applied science, elements of mechanical engineering and elements of electrical engineering
- (4) *Commerce*, that is, business methods, book-keeping, commercial geography, elements of economics and civics, shorthand and type-writing
- (5) *Agriculture*, that is, general agriculture, animal husbandry, horticulture and gardening, agricultural chemistry and botany
- (6) *Fine Arts*, that is, history of art, drawing and designing, painting, modelling, music, dancing
- (7) *Home Science*, that is, home economics, nutrition

and cookery, mothercraft and child care, household management and home nursing.

This list is suggestive and State education departments are free to build up their own syllabi and to make additions according to their needs. But in actual practice they have done nothing more than incorporate the syllabi of the intermediate with slight modifications and the opportunity to emphasise new objectives, new curricular items, and new approach has been lost. The general criticism that courses and methods in secondary schools are mainly influenced by college and university requirements is more valid today than it was before. With syllabi culled from the intermediate standard the implementation committees have too often stressed in their discussions that the new higher secondary course will cover a part of the old intermediate course and the new secondary teachers glibly follow the lecture methods of intermediate colleges. Except in the teaching of English where the structure-method has been introduced there is nothing new in either the content or the method of teaching the several subjects. And when teachers are recruited either from old intermediate colleges or from fresh post-graduates, teaching in multi-purpose schools means lecturing, dictating notes and the like. And if classes are large, as they are bound to be when different sections are combined for core subjects in the interest of economy, the dream of reconstruction of secondary education into a new pattern along the recommendations of the *Secondary Education Commission Report* will not be fulfilled. Very few teachers or headmasters of secondary schools are being associated with the framing of such syllabi.

The work is being done by professors supposed to be specialists and when examination work is also entrusted to them higher secondary schools will go the way intermediate colleges have gone, imperfect carbon copies of third-rate colleges.

I

The word 'humanities' has for centuries been used to connote so much that it has ceased to have any precise meaning. For a helpful discussion in modern education it seems imperative that it should be given a narrower definition. Humanities, therefore, may be restricted to those studies which concern man himself and the world of experience as opposed to his physical environment or the world of physical things. A humanist is a student of man. The nature of man consists, on the one hand, of instincts, appetites and primitive emotions, and of moral, intellectual and spiritual capacities culminating and flowering into human personality, on the other. The studies called humanities, therefore, are concerned with man in all his aspects, activities and relations, his intellectual adventures, artistic creations, philosophical insights — the entire sweep of art, literature, history, economics, philosophy, religion. These treasures have been dug by creative artists, writers and scholars and the true humanist not only drinks deep at the joy of contemplation of the treasures found and collected but to the extent of his capacity shares the zest of digging and discovering that priceless treasure. Mere idle contemplation or collection with a view to arrange and re-arrange objects which we admire and love is not enough for

it very often results in a sentimental attachment to some one type of literary or artistic achievement. And mere digging or delving without any cultivation of the creative faculties or knowledge of the great works of art and literature may lead to uninspired, flat and commonplace work. But the present position and function of humanities in education is nothing but tragic. Of all items of the curriculum they are considered a royal road to success in examinations. 'If you want to enjoy student life, if you want to pass your B.A. in three months' time, you take up history, economics and literature.' The methods of teaching are dull and uninspired, the content is just a skeletal record and the examinations are mechanical and stereotyped. Students feel that they can do without teachers and with a close study of the last three years' question papers can make a fair prophecy about questions in the next examination. Humanities or the arts course is considered easy and attracts all easy-going, diploma-hungry young people. This attitude is filtering down to multipurpose high schools also. The course in humanities is being offered by students who are not considered good enough for the science or the technical course. They force down the standard of teaching also.

Secondly while the usefulness of science, commerce or technical courses is obvious, the concrete liberal-arts course lacks in effectiveness and both parents and teachers find it difficult to understand and accept how they can help the preparation of youth for life in an age dominated by science and technology. Both seem to ask 'If knowledge is not useful, if it does not lead to purposeful activity, what is it?' Unless teachers of liberal-arts courses work aggressively to interpret

our cultural heritage in a living manner demonstrating clearly that science, technical and commercial courses have limitations and that liberal-arts train young people better to take a significant part directly or indirectly in the purposeful activities of their times and in the solution of problems that face our secular democracy, humanities will not come into their own. They have to offset the dangers of specialised progress and to stimulate co-ordinated thinking about the long-term social implications of scientific and industrial development. These are undoubtedly big things, they are very urgent and important too, but the courses and methods of teaching in studies which go by the name of humanities do not even achieve a fraction of it. They cannot do so without radical changes.

Thirdly teachers and teaching methods seldom convey to the students the creative spirit of writers and scholars in history, economics, literature or philosophy or an idea of the powerful forces in their social environment under which they wrote and thought. Nor are students helped to understand the social impact of what they learn. Ideas acquired in history, economics or politics are seldom applied to understand the events and problems of our own times, and how many students of literature practise creative writing, or really enjoy literature?

Fourthly even when students do think about what they are taught they do so in watertight compartments and get no idea of problems of life as they are presented in actual experience. Problems of life are processes involving many inter-related factors or influences and can be tackled by habits and skills in generalised thinking and acting for the cultivation of which there

is neither any awareness nor any effort. Arts courses are rigidly specialised throughout our educational system and no one of them alone can provide the basis for sound judgments. The subject approach is fatal to the development of such generalized thinking.

Till courses are radically revised, and it will be a long time before that is done, discussion groups, a rich programme of co-curricular activities linked with class-work as advocated elsewhere in this book will provide a very suitable corrective.

II

The science course sticks to the time-honoured tradition of providing only for the study of physics, chemistry, biology and mathematics. Only geography is the new addition. Most of the students at this stage decide if they are to take up medicine or engineering after the higher secondary course and therefore are called upon to choose between mathematics and biology. Even on a very cursory consideration this is prejudicial to the general science courses available in the universities. The higher secondary boards in some states have allowed students to offer mechanics, hygiene and physiology as additional subjects. It should have been possible to consider adding such subjects as electricity, geology, photography and radio to the list of additional subjects. There is no provision for the study of these subjects in high schools. More electives will serve to enrich the curriculum.

As has already been suggested in connection with the teaching of general science the contents of the science course should be organized into units, some

worthwhile projects should be undertaken, a larger use should be made of visual aids, home-made apparatus and community resources. Organization of science clubs, visits to local industrial plants, careful laboratory work and frequent references to the work of eminent scientists, to future developments in science, to its wide and varied applications in life and to scientific techniques, laws and principles will serve to create more intelligent interest in teaching and learning science and make the content richer.

Physics and chemistry are compulsory among the electives and it is as it should be. Both are considered very difficult subjects and a number of students avoid them because they are afraid of the grind involved. This is true to some extent. The difficulty is due to two causes. In the first place the background of an average Indian student in science is very poor, the teaching of science in lower classes is simply deplorable and the domestic technical appliances are not used in ordinary homes in our country and therefore the impact of science on our daily life is not as great and effective as it is in the West. To a large majority of students the common gadgets are only novelties. Secondly they lack proper guidance from teachers and the teaching methods are uninspiring. Courses are not functional and even science teachers have to be trained in the use of some of the new educational aids like the sound projector, the camera, the epidiascope. The study of physics dealing as it does with heat, light, sound, electricity and mechanics should provide valuable understanding of the working of such mechanical aids as telephones, telegraph, radio, sound films, steam engines, X-rays, motor cars and

aeroplanes. It is in the study of physics that students can be made to appreciate the great progress man has made in improving the world he lives in and the new and interesting developments in the field of science.

Progress in theoretical and applied physics is reaching new heights with the development of our knowledge of nuclear energy and related fields and will open out great vocational opportunities for budding scientists. This alone should be enough to fire the imagination and ambition of young students in high schools.

As it involves a mastery of strings of formulae and symbols, and some hazard in laboratory work, chemistry is not a very popular study among science subjects but its applications in actual life are so numerous that once the teacher stresses the functional practical approach it will be difficult for him to restrain the curiosity of his students. Chemistry has been generally taught in a dull mechanical way to prepare high school students for college and university courses. But there are endless possibilities of demonstrating its usefulness in practical life. In fact there is hardly any sphere of life in which it is not applicable. Our food, the conception of a balanced diet, digestion, vitamins, malnutrition, fatigue, the selection of soaps, hair oils, tooth paste, and other articles of hygiene and sanitation in the home and outside, food production in the country, manufacture of drugs, cleaning, bleaching and dyeing clothes, water supply, industrial development and manufacture of arms and ammunition, in fact there is hardly any sphere of personal and national life in which chemistry is not used. An understanding of the role of chemistry in life will help not only to stimulate

interest in the subject but also show possibilities of developing hobbies and vocational interests and of living in a more effective and efficient manner.

Laboratory work is very important in the study of chemistry but the teacher must decide beforehand what experiments are to be performed by students themselves and what he has to do for the purpose of demonstration only.

Biology is generally taken up by pre-medical students and the left-overs of medical colleges take up biology for vocations like teaching. There is still a large section of people who discourage the study of biology for religious reasons as it involves dissection work. Vegetarianism instead of promoting understanding of animal life and love for animals has resulted in an attitude of repulsion towards animals.

Although nature study is taught in junior classes young people's acquaintance with birds, plants, leaves, flowers, insects and animals is very meagre. A closer knowledge of the animate surroundings will facilitate self-understanding. And how little do we know about the structure and function of our physical body? Biology and physiology courses provide knowledge basic to proper care of the human body and can help the work of parents and teachers to teach a sane and normal view of sex life. By bringing out the great fact of adjustment in plant and animal life in processes of growth, migration, hibernation and the like, they can stress the constant need of living organisms to adjust to environment. How unfavourable environment hinders and favourable environment promotes growth, progress and happiness is a very important truth which the teaching of biology should help to bring home to young students.

In the initial stages of teaching biology the teacher would do well to begin with identification and defer classification to a later stage. 'What is it?' starts a very interesting game and students should be encouraged to bring to the class any biological specimen they can find, living or dead. Let them bring in leaves, peculiar plants they have come across, various species of toad and frog or insects and many other specimens for biological identification. The teacher should help but it would be better if they look up reference books or charts and identify the biological specimens themselves. Such exercises in identification should precede classification or dissection.

III

The technical course consists mainly of mechanical and electrical engineering. The country needs a large number of engineers in all branches in view of the rapid industrial development and the improvement in provision for technical education must be both in quantity and quality. In order to make the greatest advance in the shortest possible time the aptitude for engineering must be spotted at the secondary stage and facilities provided for higher training. Hence it is very necessary that students be allowed to take up the technical course after close scrutiny consisting of tests and guidance.

A question is very often raised: if science students are eligible for admission to engineering colleges after passing the intermediate or higher secondary examinations what is the need or advantage of providing a technical course at the high school stage? Such courses

will provide technicians for workshops and factories where work is being handled almost everywhere by products of apprentice-training who lack the scientific background and techniques.

The provision for technical courses is being made at a very slow pace and the paucity of qualified teachers is a problem that should be tackled much more seriously by State education departments. While in other courses teachers with slightly lower qualifications can do for some time, this is not so with engineering where thoroughness and preciseness in the understanding of materials and tools is indispensable. M. L. Jacks stresses three essentials of technical education: accurate knowledge, wise competence and a true valuation. 'To the fostering of these three the method of teaching must be adapted as a whole. It has been most successfully done in technical education.'¹ 'Though the aim of technical education is limited, at least it performs what it promises. It is indeed a model educational method. The skill in practice is based on grasp of principle.'²

Even the under-graduate courses in electrical and mechanical engineering suffer from want of proper practical training facilities. In co-operation with industry, facilities for industrial training should be provided for high school students. It would be better if they round off their final year by a few months of practical training in some industrial workshop.

¹ *Total Education*, p. 90.

² Moberly, W.H., *Plato's Education and Its Meaning Today*, (quoted by Jacks).

IV

Originally commercial courses were primarily concerned with clerical skills like book-keeping and stenography. Later subjects like banking, accountancy, auditing, management, marketing, and economic geography were added. The present syllabus is a replica of the course obtaining in intermediate commerce, and is generally considered top-heavy and liable to affect adversely the practical work which must be done. Most of the teachers of commercial subjects are well qualified to deal with the syllabus but if they also have had actual business experience and know some trade or business house from inside, they would be able to do justice to teaching commerce. But if they entered any business house they would not return to teaching.

Classes in commerce must not confine their energies to books alone. They must supplement their class-work with:

- (1) visits to business houses, factories, stores, agency offices, offices of brokers, travel agents, freight carriers, small shops.
- (2) visits to a bank, insurance office, post and telegraph office, railway goods office, sea transport office, publicity agents, customs office, market research department.
- (3) practical experience in running the school co-operative store, school bank, cafeteria or book store.

Practical knowledge of how to write a cheque or receipt, invoice etc. how to book an advertisement,

reserve a seat in a train or a ship, send a parcel by rail, post or ship or take its delivery, send money by post, cheque or draft and the like may best be obtained by working out projects in the school after visits to offices related to such activities. The entire approach should be practical and realistic.

In one school they had a detailed talk on how a bank works by the manager who had brought with him all types of forms being used in the bank and the talk was followed by a visit to the bank during which they learnt how different departments of a bank work. They learned much more than what they could gather from books or the teacher.

The manager of a hire-purchase office gave a very interesting talk on how his office works. He showed what forms they use and how they benefit everybody. Such activities are highly useful and should form a regular feature of work in all commerce courses.

Opportunities for practical training or work experience will benefit commerce students as they would technical students and schools should seek the help and co-operation of business concerns big and small to provide for such opportunities.

It is not possible for high schools to have all the costly mechanical aids being used in modern business houses but a practical acquaintance with them is very necessary. Students should be quite familiar with stapling, sealing, stamp-fixing, punching machines, with automatic dating and numbering machines, with comptometers, duplicators, telephone and addressing machines. They should also see the different types of office equipment, the different types of filing systems, forms and registers, account books and charts and diagrams.

Commerce courses are very popular, more popular than humanities. It is mainly because they readily lead to vocations and teachers should not lose sight of the main objective of education for social efficiency, for the benefit and welfare of society. Trade and commerce is not only an egoistic pursuit but also a social, co-operative enterprise for the service of others. This spirit of service along with the object of personal profit should receive adequate attention.

V

Food production is our major national headache and education in the most up-to-date methods of agriculture, the use of modern tools and fertilizers, and knowledge of techniques employed in other countries, should receive top priority. There is an idea abroad that agriculture is for rural youth only, that all sons of farmers should take to agriculture and that agriculture is meant for mediocre students while science and humanities are meant for the intellectually alert. These ideas hold good only very partially and education authorities should make up their mind about them only after very careful investigation. The study and practice of agriculture requires as much mental alertness, not all rural youth are inclined to agriculture and there is some truth in the claim that agriculture is the best type of culture. Nor is it clear why agriculture should be confined to boys when girls can equally profit by it and have to live and work in villages.

The course in agriculture should give an important place to experience programmes. While working on his own farm the student can have significant learn-

ing experiences and his own farm will serve as the laboratory where he can share his study with his father and brothers and carry out productive projects all the year round. The teacher should also work with him on his farm and can visit distant farms during vacation.

Productive projects are the most educational in so far as their programmes can be easily assessed and compared in terms of better and bigger produce not only on the farm of an individual or group of students but also in the village to which they belong. Students may also be encouraged to keep feeding and milk production records, to introduce new crops, to work for cattle and poultry improvement and for improvement in the general life of the community. It should not be difficult to extend such projects to the community and the village or the whole of the school campus not only to produce more but also to make it more attractive by laying out trees, shrubs and gardens. The results will be delightful besides providing interesting forms of practical activities.

But the agriculture course should not be allowed to become rigidly vocational. There should be careful co-ordination of outdoor observational and practical work in horticulture and the care of animals with the experimental and instructional work of the class-room. The aim is to develop an interest in, and a love of, the countryside and all that it means — the earth, its trees and flowers and grasses, the beasts of the field and the birds of the air, their care and companionship; seed-time and harvest, and the various duties which belong to the recurring seasons. Such lore is of permanent value to everyone whatever his later vocation.

VI

The new high school seeking to provide courses for the varying needs, aptitudes, abilities and interests of adolescents should not ignore the realm of aesthetic expression and appreciation. Fine arts have been generally neglected in secondary education. No doubt drawing and music were included in the curriculum but the courses were never carefully planned, no attempt was made to search for musical or artistic talent and what was learned was seldom carried over to after-school life. This means that they never contributed to enrich the life of the individual or the community.

The aim of courses in fine arts is to develop aesthetic appreciation and responsiveness and as this is always an individualistic affair all art instruction whether in music, painting, drawing, dancing or embroidery should be planned on individual basis. Too many people think that art is some exclusive or mysterious realm and this has led to serious misunderstanding about its place and function in education and life. In fact art is simpler to understand than, for example, language where we need mechanical skills. A certain pattern of form, colour, movement or sound evokes or arouses in us certain emotions, meanings and values, it projects or conveys them directly and spontaneously and to that extent is artistic. Such patterns appear in every field and phase of human life and activity, and their creation and expression is a thrilling experience involving both emotional and intellectual activity. It may not be possible to define art, to press it into a formula but it can be experienced, lived and enjoyed by everybody because it affects every attitude and every channel of human experience.

There are some notions about art which are so widely and uncritically accepted that all those who organise art courses should take a careful note of them:

- (1) That art is something exclusive and mysterious
- (2) That only those with special psychological qualifications can benefit by art courses
- (3) That there is an essential difference between fine arts and crafts or practical arts
- (4) That courses in fine arts are designed to produce professional artistes.

The terms used in connection with art are so vague and hazy that we do not know what we mean by them. There are three ways in which we respond to art — production, reproduction and enjoyment. A play may be produced, reproduced (staged or read) and enjoyed. Music may be composed, performed or heard. A picture may be drawn, copied or appreciated. These three modes of activity involve each other. When we enjoy a story we reproduce it for others and feel like writing one like that, and of course writing a good story quickens and matures our power to enjoy good stories. Dancers and musicians, painters and sculptors, learn much from each other's productions and are stimulated to produce their own patterns of form, sound and movement.

Principles and methods of teaching fine arts are not yet clearly developed but if teachers have an eye on the effective response that art work evokes among students much of the effort they make will bear fruit. And the response is effective to the extent to which it embodies and projects the emotional meanings and values of the work of art. Too often art teachers are

good artists themselves but do not know how to set about their work of teaching their classes. That situation will continue till we devise teachers' training courses for art teachers.

Most art teachers are very exacting and demand a high standard of production or reproduction from the very outset. They ignore the fact that maturity is a thing to be very gradually developed and the old method of proceeding from the simple to the complex, from the easy to the difficult, even if it violates any preconceived technique has at least one great advantage that it saves young people from a sense of failure and incompetence and inspires them with confidence, hope of success and enthusiasm. This by itself is no mean educational gain.

Artistic work is usually described as artistic expression, and young people grow through expression. But there can be no expression without rich and varied impression. Young people must have very large opportunities for sharing artistic experiences. In music they must listen to rich and varied types of music and must be taken to concerts very frequently, listen to recorded music and have opportunities of meeting and listening to masters. Such listening should be methodical and demonstrative, it should not be confined to any one school or country, and the teachers should discuss such listening later. Similarly students of drawing and painting should not only visit art galleries, exhibitions and museums, but also go out to see landscapes, beautiful scenes of nature in gardens and on hilltops, the riverside, the busy street-crossing, the wayside jugglers, farmers in fields, wood-cutters, iron-smiths or shoeshines at work, and the myriads of life situations to catch the

order and beauty of life, the enduring reality behind the panorama of dull and drab living.

Finally it must not be overlooked that art and music like other subjects in the curricula fulfil the developmental needs of young people, and the methods and programmes in art courses should be so devised as to promote the mental, emotional and social growth of students. Art and music serve to enrich life, contribute to mental and physical well-being, provide opportunities for self-development and open a door to useful and enjoyable leisure-time activities and vocations. These values should not be lost sight of by those who are responsible for organising art and music courses.

Another urgent need is rational and well-considered evaluation methods. The first requisite is a clear understanding of the objectives of art courses for it is in terms of the realization of objectives that evaluation methods must be constructed.

VII

The expansion of domestic science to include besides cooking, sewing and laundering such subjects as nutrition, mothercraft, nursing, gardening, child care and home economics augurs well for the general welfare of the family and the happiness of the home. Its further extension to include home arts like home-canning, preservation of fruits and vegetables, interior decoration and the like is commendable.

The instruction work in the several subjects should be shot through and through with practical work. Books should be used for self-study by students and teaching should be accompanied by frequent demon-

strations. This means that the school should have very well-equipped practical rooms and an effort should be made to acquaint students with new domestic appliances like pressure cookers. The problems faced by a household should be frequently posed before classes so that they are compelled to think in the face of a challenge. For example, in connection with nutrition, the challenge of providing balanced diet to children in the face of soaring prices within an average income will provide excellent exercise for planning and thinking on the subject. In such a context nutrition can be fruitfully integrated with home economics and child care. Opportunities for such integration will be frequent and will serve to fire instruction work with living interest.

But usually girls prefer home science, thinking it will help them to secure an easy pass by mugging skeletal textbooks. Little practical work is done in schools or expected in examinations and the main purpose of the course is defeated.

Child care should be taught after frequent visits to the children's ward in a hospital, so that students are able to diagnose children's diseases by symptoms they see and not by a list of symptoms they have learned from the textbook.

All subjects included in this course are of practical utility and should be mastered through practical experience. Apart from visits to nursing homes, children's hospitals, canning factories, laundries, factories for ready-made clothes, and the like each student should be expected to use her home as a great laboratory and teachers should frequently visit the homes of their students to see how far they are making use

of what they learn in the school. If these visits yield useful information it may be used for final evaluation of the work of students.

Home science offers rich opportunities for community service. Students should be expected to visit a certain number of homes every year to observe, study and advise them regarding clothing, nutrition, health, home furnishing, etc. They may stress how re-arrangement of furniture will add beauty to the home and provide more space, how old furniture can be renovated and how readily-available material can be utilized to improve the home. Such outdoor work will make the syllabus less technical and socialize instruction to an extent impossible in other subjects.

The general aim of home economics courses is the improvement of home life so that students learn to appreciate the value and importance of family life. If housekeeping is the most important vocation of women it should be the responsibility of education in general and home economics courses in particular to develop among girls an intelligent interest in the welfare and happiness of the family. They should take in their sweep all activities that are related to the home and the welfare of the members of the family, particularly children.

Consumer education should receive special attention in home economics. Planning the family budgets and distribution of family resources, shopping and the quality of things purchased, care and repair of furniture, drapery, foods, utensils and the like should provide interesting problems for discussion and practical solution.

Although home science courses are meant exclusively

for girls and some of the brighter girls think less of them in comparison with other courses, home-making is one of the most important vocations of both men and women and it is the special privilege and responsibility of women to turn a house into a home and help solve some of the major problems in domestic life.

VIII

The medium of instruction and examination in the high school is either English or the mother-tongue. The mother-tongue is largely used and the type of reading material available is poor in both quality and quantity, particularly in science and technical courses. The examiners used to English textbooks are likely to assess answers in the mother-tongue lower. Teaching technical subjects like engineering through the mother-tongue is not easy and these students will have considerable difficulty in professional colleges where all teaching is through English. Some of the universities do not yet teach and examine through the mother-tongue and students find it difficult to adjust. The need of co-ordination between secondary and university education in the matter of medium of instruction is more urgent than is generally recognised by education authorities.

CHAPTER VII

STUDENTS IN SECONDARY SCHOOLS

PARENTS and people in public life have been pointing out inadequacies in the products of our high schools and using it as a lever to condemn the system of education and teachers. How often we are told that an average matriculate cannot pen even an application for appointment, lacks knowledge, civic sense, discipline and character and is not earnest about his work or responsibilities. Such criticism indirectly helps to underline what the community expects of high schools.

On the other hand, students of education are never tired of repeating that education must meet the needs and interests of young students and school programmes and activities should be suitably adjusted to what the physical, mental and social needs of students are. There is no inherent contradiction between the expectations of society and the needs and interests of youth and in fact harmonising the two is an important function and responsibility of all educational effort.

Students in secondary schools are adolescents and secondary education is often described as the education of adolescence. Earlier in this book a plea was made for understanding the nature and problems of adolescents and helping them to make satisfactory adjustments. Let us recall briefly some of the needs of adolescents. In the first place adolescence is a period of rapid physical growth and needs rich and varied facilities for physical exercise and games, wholesome food and wise guidance. Secondly the adolescent is

growing rapidly in social awareness and is very sensitive about his own social acceptance, the needs of the community and the world. He needs sympathetic understanding, healthy social life and a fund of recreational activities. He is prone to feelings of insecurity, diffidence and worry about his acceptance by adults around him and has to be handled carefully avoiding situations in which he may be humiliated or piqued. His mental growth is also very rapid and marked by perseverance, independence and diligence which should be harnessed to study and discussion. These are common traits of adolescence and teachers in high schools should understand, and make note of them very clearly. However, there are some aspects of high school students in India which need urgent attention of all concerned.

I

In the first place an average high school student is under-nourished, weak in physical health and development and neither well-informed about his body nor keenly interested in its welfare. With a large majority of students the causes may be economic but that does not mean that in any programme of educational reconstruction the fact can in any way be ignored or its remedy put off. Very few schools have a well-planned programme of physical education in which individual needs are studied and provided for. Even highly educated parents are quite ignorant of the physical needs of adolescence and do not encourage young people's interest in physical culture, games and sports. Indian parents themselves do not play and cannot understand

and appreciate young people's undue enthusiasm about games and sports.

Nor is the general public very health-conscious. Their ideas about sanitation, food, rest or work are still obsolete and they do not know what is best for the physical growth of their children. It may be difficult to educate parents but some programme for health education in primary and secondary schools is very urgently needed and will reach Indian parents through their children. What they should eat and when and how they should eat it, advice regarding sleep, posture, work habits, personal hygiene have to be taught systematically. A composite course of social studies is being introduced in both primary and secondary stages and it should underline health education.

The value and importance of a mid-day meal cannot be overemphasised. An experiment made in a Calcutta high school has been very successful. During the interval all students sit down together for a community lunch. Some bring food from home, others buy from the school canteen. The school provides them with stainless steel utensils, a plate and a tumbler, but the important thing is that they begin and finish together. Gramophone records are played while the lunch lasts.

The problem of fatigue among school-children has not been systematically studied in our country but there is no doubt that the incidence of fatigue among school students is very large. To study without food for six hours or at the most with a snatch from street hawkers is sure to tell on their health and capacity to work. Some State governments contribute to schemes of mid-day meals but much more has to be done. For a nominal charge tiffin should be supplied to all students

and those who cannot pay should be given free tiffin. In other countries school-meals are a part of the school programme and contribute to the health and morale of students. Those who cannot afford it can earn it by doing extra work for the school.

At a headmasters' seminar, stories were told of half-starved boys travelling a couple of miles every day to attend school without meals in the thin hope of earning for the family on completing the high school. Surely a country aspiring to build a welfare state and an enlightened democracy cannot afford to neglect the economic and physical handicaps of the next generation. Industrial development is good but the quality of future citizens we are raising is more important. If uneducated people are a menace to democratic institutions, an unhealthy section is a greater menace. In England children's food received top priority even during the worst days of the last war.

Provision for games and physical activities is stressed in conditions for recognition of new high schools but that is obviously not enough. Those students who need the benefit of play most generally do not get it. Certain minimum standards of physical health should be enforced and considered essential before a student is allowed to qualify for the high school examination.

Medical examinations of students should be conducted regularly and some follow-up work undertaken. School records should show not only marks obtained at examinations from term to term and year to year but also physical growth and development of students.

Several education authorities are prescribing minimum age limits for candidates for the high school examination but such regulations should be more strictly

enforced and attempts to circumvent them foiled by school authorities. Some of the boys reaching class ix are too young.

II

Secondly students should be guided to acquire efficient and effective study habits and skills. If it is one of the major responsibilities of teachers that students should succeed in the school, the development of effective study habits as an educational objective assumes great importance. As soon as students join class ix, teachers stress the need of studying hard if they wish to pass the school final examination satisfactorily. The fear of public examination together with a string of warnings and exhortations daily administered by teachers is about the only impetus for work. Teachers keep telling them what they should study but offer little guidance as to how or even why they should study it.

Most of the schools proceed by assignments of home tasks assuming that regular diligent study and drill alone will pay high dividends in understanding and acquisition of knowledge which later on is to be tested by written examinations. As the public examination — the first of its kind for high school students — consists of essay-type questions the students are encouraged and even goaded to write those essays with or without the help of books and commit them to memory. In some cases, answers to expected questions are dictated by teachers and where nothing helps the 'bazar notes' come in handy. These are cheap, handy and simple, and deal with 'star' questions. These practices kill

whatever little interest or enthusiasm young students have for genuine study. Thus in most schools they begin at the wrong end and all their efforts misfire.

Perhaps the most important thing to begin with is to hold out to students examples and ideals of great scholars, how most of the eminent people in public life were distinguished students in their own days and what are the pleasures and benefits of close and diligent study. Such examples are too readily available from among our great men.

The next best thing is to discuss with students the aims and objectives, the benefits and values of the study of several subjects in the curriculum. Such understanding materially contributes to the approach and work of students. For example the new emphasis in the teaching of English on skill and ability in expression, on structures, rather than on content and summaries of lessons and poems when repeatedly explained to high school students substantially changed the outlook of students and led them to inquire what programmes of study they should adopt. The *Secondary Education Commission Report* has again and again pointed out that all teaching is to be measured in terms of learning as understood in terms of understandings, appreciations, attitudes and skills acquired by students and these aims when discussed with students in respect of every subject in the curriculum will bring new enlightenment to young people engaged in study and serve to change their outlook and sharpen their interest.

Some of the problems on which students should be advised in detail are:

1. How to use the textbooks

2. How to prepare the lesson
3. What to do during the lesson
4. How to take notes
5. How to take dictation
6. How to use the dictionary
7. How to use the library
8. How to outline written work and what preparation to make for it
9. How to study the corrections indicated
10. How to do home-work
11. How to take part in debates, write for the school magazine or prepare projects
12. How to memorize and do practice in sums
13. How to interview or discuss things in small groups
14. How to prepare for tests, internal examinations and final public examinations
15. How to consult, and take the help of, teachers
16. How to improve speed and comprehension in reading

Teachers are inclined to think that these are too obvious and take them for granted. This is not quite correct. In the first place study techniques cannot be left to chance and students must be given 'know-how' advice, preferably in the beginning of the session. Secondly study habits have to be carefully developed. Many young people who are found to be quite bright do badly at school because of lack of knowledge of study techniques and habits. While provision for a library period is being increasingly made in high schools, the provision for a study hour is rare. In some high schools in Calcutta one hour at the end of the

school routine is kept apart for students to work quietly at home tasks under the supervision of their teachers. Some remedial work can also be undertaken in this hour.

Apart from this general guidance individual study habits should also be studied and students helped to get over their difficulties. But more of it later.

III

Generally speaking high school students in India are not adequately socialized, that is, not properly adjusted to expanding human relationships. This takes on the form of a long and continuous moral or social struggle in which the natural egoism of the individual meets the challenge of social environment — the family, the class, the team, the school community and the society at large. The young people have to learn to control their instinctive impulses so as to make them compatible with the traditions and ideals of the society of which they are to be members. They must grow in social understanding and insight, develop a social outlook, social interests and attitudes, concern for others, a sense of social responsibility, a live-and-let-live spirit. This growth is very difficult, often involves a painful struggle and needs a great sense of humour and a broad human approach on the part of parents and teachers.

It may be objected that this is true of adolescents all over the world and the problems and difficulties of the process of socialization are not peculiar to high school students in India. This is true so far as it goes but let us not forget that social objectives of education are not yet clearly conceived and accepted by our

secondary schools nor are they reflected in the curricular programmes and procedures. No doubt a number of activities in high schools have a social bearing and some attempts are being made to give students opportunities for community service and social experience but all this is very haphazardly done and the social objectives are seldom placed in the forefront. The result is obvious. An average product of the high schools is socially awkward and ill-adjusted, self-conscious and uncertain, self-centred and egoistic.

In this task of socialization there is one helpful factor. Adolescence is a period marked by great social awareness and sensitivity to social needs and values, and such objectives as the welfare of the community, the school or the world at large have a special appeal for adolescents. The responsibility of the school lies in providing situations and experiences in which healthy social attitudes and interests may find encouragement and stimulation. Social growth takes place through activity and experience, and instead of exhorting, lecturing and preaching ideals, real life experiences and activities should be provided wherein lessons of ideals and worthy attitudes are brought home to them. Social service leagues, community work, running night schools for adults, organising textbook libraries for needy students or societies for the help of such students, St. John's ambulance units, scouting and the like will bring home to young people how we all need each other, how certain types of conduct are right or wrong, how we must be loyal to certain ideals and still tolerate other people's lapses, how others cannot think, feel or behave like us and how we must accept and harmoniously work with our fellows.

In the pre-independence days religious and political associations and institutions provided a large fund of enthusiasm and opportunities for social work and experience and students' voluntary organisations did what schools failed to do by way of inculcating ideals of social service. In the first place those sources have for one reason or the other dried up. Secondly they reached only a few and a large majority were not called upon to play any effective part in their programmes. Our present need is to provide opportunities for social growth of all students, to promote intelligent social behaviour so that each individual is concerned and works for the welfare of the group, to promote and develop loyalty and devotion to the democratic ideal, peace and happiness of all mankind.

It is frequently alleged that present-day practices in high schools encourage competitive spirit, extreme individualism, and exploitation, and every student is engaged in a struggle for individual success and glory. But with increasing emphasis on all-round growth of the individual, the so-called conflict between the individual and society will disappear as the individual is being educated by and for life in a democratic society. The new deal in secondary education is very emphatic on this point. Not only are schools expected to make a large provision for numerous group associations and activities but students' participation in them will have to be recorded and assessed, social studies and general science are a part of the core curriculum, and group work has been accepted as an important and necessary feature of programmes and methods of teaching. In study, solving problems and working at projects students are enjoined to work together in groups and share

experiences; group discussions with exchange of thoughts, respect for each other's opinions, objective analysis and evaluation, open-mindedness and unity of purpose provide valuable opportunities for group thinking; and trips, excursions, health squads, community or village work will promote both social understanding, close friendships and attitudes of co-operation and mutual helpfulness.

Often group discussion is organised into a parliament, mock or serious, and students are divided into parties on the analogy of political parties in the country with the avowed aim of familiarising students with parliamentary practices and procedures in a democracy. This may be good enough within limits but to have party system in all discussions may bring in its wake party struggles, heckling, lobbying and similar practices which are not conducive to social growth. In fact teachers must always be on guard that activities do not lose sight of the goal they are expected to realise.

Students in high schools should acquire a proper sense of responsibility. But there can be no responsibility without freedom. Unless students take part in a large number of things and activities by themselves, proposing, planning, choosing, deciding, executing and evaluating themselves, they cannot develop any sense of responsibility. High school students are not yet adults nor are they helpless children who may be led by the nose. Parents and teachers should recognise this fact very early and give them opportunities for the exercise of initiative, choice and judgment as much as possible. At home parents may share with them knowledge of the family budget and allow them to join in discussions of personal relations. In school teachers may trust

them with minor roles in teaching, discuss their work with them with sympathy and allow them greater freedom in organising and running co-curricular activities. In some schools they have no invigilators in internal examinations and students are expected to play fair. In others on days when the staff has a meeting senior students are expected to take classes and some of them have done quite a commendable job in junior classes. Often they requested the principal to be allowed to discard their half-pants for trousers on that day and entered upon their work with great earnestness and seriousness. There is great truth in the Indian saying that responsibility educates as nothing else does.

Growth and maturity means growth in self-dependence and self-direction and these can be taught better by habit training than by explanations, reasoning and preaching. Trust will beget trust and if teachers allow students to do things on their own and provide opportunities for activities and experiences favourable to independent judgment and action, young people will grow into strong, healthy personalities, capable of shouldering their duties and difficulties in life. Usually the sense of responsibility is accompanied by a maturity in thought and attitudes and parents and teachers should help young people to form their own ideas about things and to develop their own sense of values.

But it should never be forgotten that whoever grows, tries and errs, and adolescents growing rapidly and suddenly are liable to err and go astray, they also feel like entering a new world and there is insecurity, uncertainty and diffidence in their approach. Over-anxious to win adult approval and acceptance they often overdo things and slip. Teachers should avoid

humiliating them or reprimanding them in anger. A helping hand, a kind word and a generous smile will avert the stumble and convert worry, uncertainty and diffidence into robust self-assurance and confidence. Unhealthy brooding, day-dreaming and worries to which adolescents are largely liable are mostly caused by the intolerant and unkind approach of parents and teachers who insist on adult standards from adolescents.

IV

High school students are poorly equipped for a wise use of leisure and for fighting fatigue, tension and boredom which are all too common in modern civilized living. During their school years they should acquire skills and abilities to entertain themselves, to derive pleasure and personal satisfaction by participating in recreational activities. Cultural programmes of dance, drama and music and hobby clubs should be organised in every school not only to entertain public audiences at school functions, not even to give opportunities to the talented few, but to reach each and every student so that in his leisure he may indulge in some activity which is pleasurable and interesting. In after-school years they can contribute to raise the standard of cultural activities of the community.

Every student should have a hobby and the fact should find a place in his cumulative record. It should not be difficult now that with the introduction of general science and craft in high schools the possibility of organising hobby clubs has largely increased. In addition to co-curricular activities there should be

science clubs to stimulate students' interest in hundreds and thousands of possible applications of science, art and craft clubs in which students discover for themselves what pleasure there is in handling tools and making things of daily use, book clubs to provide leisure-time reading and listening, gardening, photography, stamp-collecting and the like. Radio, films and magazines are becoming very popular and are within reach of almost everybody. Should not these be discussed in groups so that out of discussions may grow some sense of discrimination? For example, films have come to stay in our life and if teachers and parents instead of condemning them outright discuss them appreciatively and critically they may help young people to discriminate between films and choose among them. There may be clubs of hiking, swimming, physical activities. In one school they have Early Birds and members have to rise early at a fixed time and join in some physical activity.

To ensure continuation of these interests in later life there are two things very necessary. In the first place these hobbies should be carried on outside school hours. Teachers' guidance when called for should be available and students themselves should frequently evaluate them with the help of teachers, but activities for the most part should be independent of formal school affiliation. Secondly wherever possible parents and others whose interest and achievement in any area are well known should be invited to join such clubs so that students may realise that these interests are life-long interests, people outside the school need them as much as they do and they are a useful carry-over from school days to adult life. Such a programme will help

substantially to enrich the cultural life of the community.

V

Perhaps the bitterest charge against students in India is that they lack character, have no sense of discipline or earnestness about anything, are inclined to take life easy, do slipshod work and have no regard for the old Benjamin Franklin method for hard and honest labour. 'One of the main criticisms', observes the *Secondary Education Commission Report*, 'against modern education is that, by concentrating too much on examinations, enough attention is not devoted to activities that promote the formation of character and inculcate ideals which make for personal integrity and social efficiency.'¹

Character is considered by most people as of first importance in the education of young people and the *Secondary Education Commission Report* has devoted special attention to the problem. Its treatment is both objective and judicious. In the first place it is clearly emphasised that the school is a small community within a larger community and values, attitudes and modes of behaviour which have currency in national life are bound to be reflected in the schools. When corruption, graft and nepotism are rampant in public life and when nothing pays except conformism and sycophancy, young people are sure to imbibe the feeling that 'excellence and integrity do not count, that influence and patronage are indispensable for success, that fairness

¹ *Secondary Education Commission Report*, p. 119.

is the exception, and that corruption, malice and intrigue can bring the highest rewards.' Individual values get distorted and talk about character and high ideals appears sham and hypocrisy. But does it mean that the school should also lose its moorings? Or should we on that account 'condone the failure of the schools to impinge purposefully on the character of their students?' Or should teachers give up because the odds are heavy? There can be no doubt that schools are expected to take an active part in character development. Let us outline a few suggestions:

1. As the Report suggests the schools should provide a selective environment and atmosphere in which students may be able to transcend, to some extent, the pattern of thought and behaviour obtaining in their home and neighbourhood. If schools can offer better physical conditions of work and study, it cannot be beyond their power to provide a better and higher social atmosphere in which students think and behave on a nobler and higher plane. The atmosphere of study and teaching is favourable to a loftier tone.

2. Into this loftier tone parents should be pulled by enlisting their co-operation and participation in a number of students' functions. A healthy and effective co-operation between school and teachers on the one hand and homes and the community on the other will help not only to add weight to educational efforts to develop character but also to extend the reach of better thoughts and modes of behaviour to parents and the community. It may be presumptuous to think that schools can contribute to the moral uplift of the people but the support of parents to reinforce the influence

of the school will be helpful and its reflex effect on parents will be good.

3. The headmaster and the teachers should function as a fountain-head of all that is good and desirable. Through precept and example they can and do exercise a very strong influence on the character of their students. If qualities and traits of character which the headmaster and the staff wish to cultivate among their students are reflected in their own work and character, if they themselves set a high standard of thought, work and conduct and create among their students a strong desire to emulate their example, character education will not present any serious difficulty. The *Secondary Education Commission Report* observes 'It is possible to organise school work in such a way and to build up such traditions that the students will do everything they undertake with efficiency, integrity, discipline, co-operation and good temper.' That would be possible if programmes are well planned and every teacher lends his wholehearted co-operation and help in the formation and execution of the programmes.

4. Character develops in action. Young people become good, honest and sympathetic only when they are placed in situations where they can behave in a good, sympathetic and honest manner. Schools should provide situations in their programmes in and outside the classroom for students to practise good manners to be sincere, honest and courteous. Life is full of situations in which these qualities are needed and schools abound in situations where these qualities can be developed, and the general principle holds good that the best way to learn a part is to play that part. Habit

plays an important part in character formation as it does in all learning.

5. A carefully planned programme of orientation, guidance, counselling and adjustment running continuously at all age-levels will be a very helpful influence. Appeals to reason and common sense with the help of anecdotes, events from the lives of great men, sayings and the like made in meetings of students do not go unheeded. When the session starts a vigorous beginning should be made with the ideals, mottoes and objectives of the institution itself and in celebrating anniversaries of eminent leaders the emphasis on moral ideals should be kept up. In India there is no dearth of such occasions and in fact all good schools do make use of such anniversaries, to emphasise character traits, ideals and moral principles. If this programme is accompanied by efforts to guide, advise and help students in their personal problems and difficulties the moral tone and behaviour in the school will definitely improve. Adults, including teachers, are inclined to be cynical about this heavy moral tone or churchiness but adolescents with their enthusiasm for ideals take them earnestly.

Everybody feels strongly about the need and value of discipline among students. The *Secondary Education Commission Report* is very emphatic: 'No amount of improvement and reconstruction in education will bear much fruit if the schools themselves are undermined by indiscipline.'¹ At the slightest provocation and frustration Indian students have burst into very bad forms of violent and anti-social behaviour. But

¹ *Secondary Education Commission Report*, p. 12

this is by no means the general rule and students have also resented and condemned such behaviour though, as is always the case, the more violent are the more vocal and shout down the sober element. Acts of indiscipline are the marks of an immature person and the result of bad training both at home and in school. Education means growth and maturity and a mature person thinks well before acting and persists in the course of action against distractions, frustrations, difficulties and hardships. Life is full of setbacks and failures and an educated mature person tries to adjust to life situations through constructive effort. He is also sensitive to other people's feelings and seeks to maintain good human relations. In a democratic society many problems have to be solved in a co-operative way, through group deliberation and effort. Unless young people learn to hold their immediate and selfish interests and opinion in check against group interests and opinions, that is, unless they acquire self-discipline, freedom, democracy, education, culture and some of the finest gifts of civilized ways of living will be denied to them.

Discipline begins in the cradle and habits learned in early childhood form the foundation. That is why students from good homes do not present difficult problems of discipline. The personal example of parents acts as the leaven. Later healthy group experiences provide for the growth of healthy attitudes towards our fellows. Games, debates, drama, discussions, scouting, N.C.C., community lunch, social service squads and other group activities will teach them the pursuit of worthwhile objectives with diligence, perseverance and good will towards other students and the

teacher. If the atmosphere in these activities is congenial and there is a healthy spirit not of rivalry but of seeking approval of one's fellows, if the teacher participates but keeps himself in the background following rules of decorum as rigidly as he expects students to do, and if the programme is free from worry, frustration and intimidation and underlines co-operative learning, there is no reason why problems of discipline should be so baffling. The programmes and methods indicated in the new scheme of secondary education should prove helpful.

But the most important factor is the personality of the teacher. What sort of person he is, what interest he takes in his students individually and collectively, how he does his work, how earnest and devoted he is to the welfare and happiness of his students, what respect and devotion he inspires in them, whether students look upon him as their friend and guide, whether the school is a well-knit community with traditions, ideals, *esprit de corps*, school ties etc. will determine the nature and strength of discipline in the school. Ultimately it is not this rule or that order which matters but the type of persons one comes in contact with and the type of social atmosphere one lives in which determine one's ways of thought and behaviour.

When acts of indiscipline do occur, the headmaster and the teachers should deal with them in an objective manner, with understanding, sympathy and consideration. In the first instance the students should be allowed some time to think over what they have done and then allowed to speak freely for themselves. Most often they will say what the teacher or the headmaster would have said, but if the teacher or the headmaster jumps

at words and forestalls him, the students would draw within themselves destroying the rapport that would have unmasked the offence and restored healthy relations. The form and method of punishment should not in any way injure the self-respect of the student and in any case anger, grudge, hatred etc. should be eschewed. Generally high school teachers should deal with cases of indiscipline by themselves and refer only exceptional cases to the headmaster. Frequent references to the headmaster reduce the influence and the prestige of the teacher.

CHAPTER VIII

METHODS OF TEACHING

TEACHING and learning occupy the central place in the process of education. Young people are sent to school to learn things, to acquire knowledge and information, skills and appreciations, and teaching seeks to help this learning. But how seldom it is realised that teaching if it does not result in learning is hardly worth anything. Effective teaching leads to effective learning.

There are as many definitions of learning as there are of education. Some emphasise the products or results, others stress the process, of learning. 'Learning is knowledge and scholarship,' 'Learning is the process of acquiring habits and knowledge,' 'Learning is profiting by experience,' 'Learning is acquiring suitable responses to stimuli or adjustments to environments,' 'Learning is the effect of training or practice throughout life,' 'Learning is problem solving,' 'Learning is the general name for changes in the nature and behaviour of human beings,' 'Learning consists of those changes brought about by experience by which the child is able to do things, to think, to take attitudes, to judge and the like,' 'Learning is maturation.' In every field of thought and life divergent approaches are bound to develop and of these competing views of learning each has merit while no one is final. But in all these definitions there are certain points of agreement and certain common presumptions and these when clearly brought out and understood will materially help the discussion of the topic in hand. A practical pattern of effective

teaching is difficult to develop without considering these basic agreements.

In the first place these divergent definitions reveal that the learning process is much broader than many have conceived it to be. In any case it is broader than the traditional practice of committing things to memory and drill, it goes beyond the years of formal schooling, beyond the efforts of the teacher in the class and extends to the whole life of the individual.

Secondly all learning is growth — growth in thoughts, feelings and actions. Whether it is the acquisition of standardized subject-matter in and out of books or of habits, skills, attitudes and appreciations, the learner is growing and maturing. Learning is a developmental process, a process of progressive adaptation and different areas of the subject-matter such as language, mathematics, science, history or art are not merely blocks of stuff but avenues of mental development. The child is not learning reading but growing in reading ability.

Thirdly growth is the product of the interaction of the individual and his environment but the individual and his environment are inseparable. No doubt some forms of growth are conditioned in a very large degree by the kind of environment in which the individual lives, for example richness and variety of experience and encouragement from parents and teachers may influence the intensity, the persistence and the variety of interests but no trait of human personality can be ascribed entirely to environment. The constitution of the individual is as important a factor in growth as the forces of environment. The two must and do work together.

Fourthly it is the whole organism, the entire individual, that learns. Although we speak of faculties as if they are dissociated from each other, 'my legs have had no practice,' the individual must be conceived as a whole and acts as one integrated unit in all learning whether he is learning to write, drive a car, play a musical instrument, swim or do sums. The new skills, attitudes, habits or appreciations that are being learnt are for ever being integrated into patterns of conduct. Things are not learned in isolation. In writing composition on any subject the pupil is having an exercise in thinking and writing but also he is acquiring certain attitudes towards the subject, the teacher and his own work. Thus along with the given assignment a number of other things are being learned.

Fifthly the highest and the best form of learning takes place in the realm of personality. Not only all forms of human experience and learning interpenetrate indissolubly, the individual responds broadly and along with the acquisition of facts and principles, general attitudes, interests and ideals are developed, dominant purposes are directed and redirected in the light of approval-disapproval, testing of consequences, and critical analysis of goals. All this affects personality. In fact personality is the resultant product of learning and growth, of the absorption through experience and education of all the values that go to make up a human being. It is an achievement helped by the teacher and his teaching.

Sixthly the rate, quality and varieties of learning are to a very large extent determined by individual differences. For example, the teacher gives group practice to all pupils for an equal period of time. The

slow learner will practise on a smaller amount of material than the rapid learner. If the same amount of material is given to both, the rapid learner will finish earlier and mark time till the slow learner has finished. Thus the classroom work tends to reduce individual differences, the slow backward pupils receive encouragement and stimulation but the bright ones are retarded and suffer.

Lastly the best and most effective learning takes place in response to needs, purposes, interests or goals of the learner. Education and learning instead of helping and encouraging children to pursue values should put them in a position to create and develop values for themselves. We have begun to realise this in the primary stage and allow children freedom to work out projects and play house, shop or bank according to their interests and needs but that realization has yet to come in the secondary stage. The drive behind the learning process must be a clearly recognised purpose whatever the stage of education.

Effective learning depends on effective teaching but too often procedures, devices and techniques are mistaken for methods of teaching. Method is a much wider and more vital thing. As the *Secondary Education Commission Report* has pointed out:

‘A method is not merely a device adopted for communicating certain items of information to students and exclusively the concern of the teacher, who is supposed to be at the “giving end”. Any method, good or bad, links up the teacher and his pupils into an organic relationship with constant mutual interaction; it reacts not only on the mind of the students but on their entire personality,

their standards of work and judgment, their intellectual and emotional equipment, their attitudes and values.¹ The Report goes on to add that 'Good methods which are psychologically and socially sound may raise the whole quality of their life; bad methods may debase it.'

Method is directly concerned with mind, life and personality; its business is to create through the process of growth, a certain attitude of mind, a certain way of life and a certain pattern of personality.

Of late two important changes have helped us to revise and reconstruct our approach to education and teaching. On the one hand, developments in educational psychology have considerably improved our understanding of the process of human growth, physical, intellectual, emotional and social. Today we know much more precisely and fully how people learn and develop. Secondly our knowledge of the nature and needs of society have developed so much as to radically change our conception of the types of services that our schools are called upon to render. The pattern of our social life has changed and is changing rapidly and this has brought about a radical change in the place and function of the school in society. Educational psychology and sociology are basic to educational thought and practice. What we teach, how we teach and what results we achieve are very largely determined by the insights given by the study of these two sciences. The main purpose of teaching is to utilize the curricular content for promoting and fostering intellectual, emotional and social growth in some definite directions dictated by social welfare and progress, its practical

¹ *Secondary Education Commission Report*, p. 102.

pattern must be determined by the principles and characteristics of the developmental process. Syllabi, curricula and subject-matter howsoever perfectly organised will fail if they do not help young people in the main business of growing-up. They should not merely grasp and acquire information but should be gripped by things they have come to know, their deep and enduring interests are awakened, they develop a new outlook, a new insight and understanding of themselves and the world around them. This is what method should do to them, to vitalize subject-matter in such a manner as to draw out the individual capacities of pupils, resulting in clearer understanding, fuller interests, greater personal efficiency and happier lives. The *Secondary Education Commission Report* has expressed it more pointedly:

‘Even the best curriculum and the most perfect syllabus remain dead unless quickened into life by the right methods of teaching and the right kind of teachers. Sometimes even an unsatisfactory and unimaginative syllabus can be made interesting and significant by the gifted teacher who does not focus his mind on the subject matter to be taught or the information to be imparted but on his students — their interests and aptitudes, their reactions and response.’¹

In the choice and assessment of methods, teachers must always take into consideration the results achieved. Since effective teaching must lead to effective learning these results or end-products must be sought in the character and personality of the learner, that is, under-

¹ *Secondary Education Commission Report*, p. 102.

standings, appreciations, attitudes and values inculcated in him consciously or unconsciously. These end-products are not unrelated to subject-matter but not the subject-matter that is committed to memory, vomited in the examinations and thereafter forgotten. History is not merely a record of events but an attempt at understanding our past. It should give insight into social phenomena and such insights make life and environment meaningful to the learner. Similarly arithmetic is not merely calculation and doing sums but an exercise in abstract but relational thinking which is so much needed in life. The successful and effective teaching of the so-called subjects is to be assessed not so much in terms of the ground covered nor in examination scores but in terms of what insights, appreciations and attitudes it helps to cultivate in the learner, that is, how far it affects the thought, life and personality of the pupils.

(Therefore it is not possible to indicate any one method as the 'best' method. Methods will have to change with the needs, interests, attitudes and abilities of pupils and with the mental and moral make-up of teachers. Again varying situations and circumstances in the school and the classroom will call for numerous adjustments and adaptations. The main goal of promoting and fostering the mental, emotional and social growth of pupils is the only constant and provides a criterion for successful teaching. The International Team appointed by the Government of India to study and report on *Teachers and Curricula in Secondary Schools* has treated the topic in a very lucid manner:

'We do not believe there is any such thing as the "best" method of teaching, when applied to the large

body of teachers. We believe that methods are "best" only as they apply to the infinite variety of circumstances and conditions existing in given situations. That method is "best", therefore, which best expresses the particular abilities, experiences and personality of the teacher, working with a particular group of children, under particular conditions — always keeping in mind the objectives being sought in the teaching. From this point of view, there will be a wide range of "best" methods, the criterion of evaluation being their effectiveness in terms of the objectives.... To be best or even good, methods must be the expression of the creative imagination and individual ingenuity of the teacher, working in a particular situation. Methods which are excellent for one teacher may be dull and routine when attempted by another teacher. Again, methods which may be excellent when employed by a given teacher in one situation, may prove to be singularly ineffective when employed by the same teacher in a different situation or with a different group of pupils. For these reasons, we do not believe that methods can be taught as such, although we do believe that examples of good methods can be demonstrated and that the underlying principles of good methodology can be taught, intellectually understood and made to influence teachers in their development of good methods.¹

Such a view has far-reaching implications which must be clearly understood and appreciated. If each teacher has to strike out his own approach and if there are no uniform or identical methods for the use

¹ *Teaching and Curricula in Secondary Schools*, p. 81.

of all teachers should we still continue to train teachers? If nobody can teach teachers how to teach, training and supervision cease to have any significance. The International Team offers an excellent answer. 'Teaching is an art and just as you can teach the artist only how to wield his brush and paint and the rest he has to supply from his individual imagination, ingenuity and creativeness so you can teach the teacher to use certain skills and procedures which help him, to develop from his interests and abilities, methods of teaching which best enable him to be creative.' 'Creativity ceases when the teacher succumbs to stereotypes of practice and, thereby, loses his urge and capacity for developing better and more effective ways of attaining his objectives.'¹

II

The *Secondary Education Commission Report* pleads for 'dynamic' methods of teaching and this is in consonance with the radical changes in the aims and objectives of education. When the aim of education was simply the acquisition of knowledge and information from books or the teacher the methods of teaching were rigid and inflexible. The teacher presented the subject-matter in a logical manner and expected pupils to master it through memory. Lessons were prepared once for all and taught from year to year in the same manner. The approach was authoritarian, pupils accepting uncritically all that the teacher had to teach. The new approach is dynamic and emphasises the growth and development needs of pupils. Education

¹ Op. cit. p. 81.

is growth and the teaching methods must help to promote this growth by meeting the needs and interests of pupils. Now young people's needs and interests are always changing because they are growing and developing, the needs and interests of groups also vary, the circumstances and setting of every class is different, and in the modern age the social environment in which they grow and develop is also rapidly changing. So much so that it is difficult to foresee today what will be the nature of the world or the pattern of society in which the next generation will find itself on maturity. Therefore the methods of teaching should be flexible so that it is possible for the teacher to adjust himself to any change in the learning situation, and they should aim not merely at imparting knowledge in an efficient manner but also at inculcating among pupils desirable values, appreciations and qualities, and proper understanding, attitudes and habits of work so that when they grow up they are able to make rapid and ready adjustments to a rapidly changing environment in the modern world. Thus alone they can achieve efficiency, success and happiness.

III

The *Secondary Education Commission Report* has detailed in an excellent manner some of the attitudes, habits, appreciations and skills which such dynamic methods should help to inculcate among pupils. In fact throughout the *Report* the point has been laboured with great advantage if not explicitly then by implication, that the merit and value of everything taught and learned in schools is to be measured in the last resort in terms of

its effect on personality. Let us recall a few of the important mental and moral qualities and attitudes which should be cultivated.

In the first place our methods of teaching to be significant and effective should help to expand the range of students' interest. 'A cultured man is a person of varied interests and if healthy interests are fostered, they will enrich the personality.'¹ Young people are growing fast and are naturally interested in a large variety of things. Participating in a rich programme of varied activities in the school like trips, excursions, games, social service, library reading they will reveal their interests, strengthen and develop some of them and gradually these interests will be woven into the very texture of their personality.

Interest is a key concept in modern education and in our effort to harmonize means and ends we seek to base all educational activities on pupils' interests. The new teacher is told again and again to begin with the natural interests of pupils as far as they can be known and offer him only those experiences and activities which have some connection with his interests. Nothing can be taught and learned effectively if these interests did not exist already. Objects not interesting in themselves become interesting when associated with things in which pupils are already interested. Interest is the starting point. But it is also the end-point, an educational goal. Interest not only indicates growth but it also stimulates new growth. It is a powerful force ensuring continuous growth. Too often a person can rise almost to any height if he has deep, abiding and persistent interest in any field. If

¹ *Secondary Education Commission Report*, p. 105.

teaching methods can help to kindle sparks of interest into flames and if such interests are associated with a variety of things, they will easily ensure other goals and objectives.

But the teacher cannot simply wait for interests to appear and then use them as a lead or a starting-point. For one thing there are no ready-made interests and for another, what there are are likely to be of narrow and superficial range, attached to insignificant and trivial things or activities. It is an important job of the teacher to organise and create interests within the range of pupils' capacity and experience and to present situations that answer his needs and purposes and have the dynamic quality of interest. Some interests are very ephemeral as the passing interest in things seen in a shop-window but some persist and grow into a serious life purpose. In the beginning imagination runs riot and carries away the adolescent into all sorts of dreamlands, but gradually realism and reason dawn, and ambitions and interests assume a constructive direction. It is for the teacher to present impressions and experiences in a manner which give pupils satisfaction with the content, activity or the subject-matter and arouse the fullest and the best response from them. In this inter-play of his entire personality with the learning situation more permanent interests will develop. Now it is stressed that such interests should have a rich variety, they should be intellectual, social, economic political, religious, artistic in varying forms and degrees so that his personality develops a variegated pattern, he can take part in a variety of activities and he can achieve efficiency, success and happiness in a large variety of situations.

Secondly 'the highest value that all methods should try to inculcate is love of work and the desire to do it with the highest measure of efficiency of which one is capable.'¹ Whatever they attempt should be done to the best of their capacity, and education should develop in young people the habit and desire to pull their full weight in all undertakings, whether mental or practical. There is a common complaint that the modern young man does not apply himself fully and earnestly, that he is thinking more of frivolous pursuits than of doing his job earnestly and that shilly-shallying patchwork is all that he is capable of. Whether such a complaint is justified or not it is quite true that 'if education fails to develop in the students a real attachment to the work that they are doing in school and the will to put the best of themselves into it, it can neither educate the mind nor train the character.'² But people become what they are fed on. The vast majority of students are being educated in our high schools only to get the better of examiners somehow, with notes and summaries purchased from the bazar or dictated by the teacher and there are numerous agencies which claim to help you to pass the highest examinations with the minimum of effort. How can the youth, under these circumstances, learn to strive to his utmost, attend to details and to make a thorough job of his assignment? In a country where leaders are never tired of exhorting us to tighten our belts and do our best to build a stronger and more prosperous country it is really sad that our standards of work should be low. 'The secondary school can render no

¹ *Secondary Education Commission Report*, p. 103.

² *Ibid.*

greater service to the students (and ultimately to the nation) than by raising their standards of efficiency in everything and creating the necessary attitude for the purpose. The motto of every school and its pupils should be "Everything that is worth doing at all is worth doing well" whether it be making a speech, writing a composition, drawing a map, cleaning the classroom, making a book rack or forming a queue.¹

But the cultivation of such an attitude to study and work is not simple and easy. When examinations continue to be a gamble and reliance on notes and summaries or on just what one looks up just before the examination gives satisfaction, painstaking diligence is hard to accept. Again if attitudes are caught rather than taught teachers should be very careful that they themselves set an example of devotion to work and thoroughness, that they do not condone or tolerate slipshod work and that they put a premium on good work by some sort of public appreciation of it. It is only through satisfying experiences that attitudes can be changed. Serious, earnest and conscientious approach to teaching will lead to similar approach in learning and the attitudes of teachers infect their pupils. Lastly education for character should not be incidental as it is present. Nor should it be left to vague and general sermonising repeated *ad nauseum*. A more definite and systematic programme should be followed.

Besides in a high school, talks on mental health should be given with advantage and general attitudes to work should be frequently discussed. The ideal of personal efficiency should be frequently stressed together with the importance of a healthy attitude to work. They

¹ *Secondary Education Commission Report*, p. 103.

should be encouraged to enjoy their work, to concentrate on what is pleasant and to make and get the most out of every piece of work. Work should be made to appear as a source of fulfilment and the larger meaning of everyday life and work should be brought out every now and then. Such self-consciousness on the part of growing youth will throw them on their own and minor objectives of passing examinations and making a living will give way to higher ideals of making life worth living through dedication to work and service.

Thirdly on the intellectual side the most important objective of teaching methods should be to develop the capacity for critical and independent thinking and clear and lucid expression. The modern world is not only full of 'plural possibilities' as the *Secondary Education Commission Report* points out but also of increasing disjunctions, doubts, confusions, difficulties, problems, novelties and sudden changes and the importance of teaching children to think and think for themselves cannot be overstressed. The need of recognising and seeing through blatant and insidious propaganda, of making wise use of the new products of science like the radio, the film and the like and of understanding, interpreting and appreciating policies and programmes of a democratic secular republic that we are—these are a few of the kind of things our secondary schools cannot ignore for the additional reason that for a vast majority of our population the high school will mark the highest stage of education and if they do not learn to think independently and clearly in the high school, they will not be able to plan and direct their own lives or to function

as responsible citizens of a democracy which means co-operating with others in fashioning the life of the community.

It is clear that thinking takes place when we have to meet a challenge, to solve a problem, to clear a doubt or uncertainty or to remove an obstacle, that is, when there is a check or thwarting in our activity. Now if development of critical thinking is the heart of the teaching method, it follows that programmes of teaching must provide ample opportunities for experience and activity in the course of which pupils are called upon to deal with problems and difficulties of social significance which are within the range of their ability and interest. It is not a matter of putting questions and obtaining answers from pupils but of presenting a challenge. Let them understand the problem clearly, obtain relevant information, interpret the information obtained, form hypothesis on its basis, verify that hypothesis and accept or reject it in the light of further evidence or better understanding. In this process the teacher must guide and help the pupils to find the correct solution of a problem. He should not be interested in solutions but in the thinking ability of his pupils. He may sometimes provisionally accept even a wrong solution only to help pupils to test and replace it by the correct one.

Language is not merely a means of communication but a tool of thinking. It provides pegs on which we may hang our ideas and make them more definite. It is difficult to develop thought without language and clear thinking usually goes with clear expression. But by clear expression is not meant any eloquence or ability to make speeches but the simple ability to say

what one thinks accurately and clearly so that the listener understands what has been said.

Clear thinking and expression is an ability which improves with exercise and practice like other abilities and school programmes must provide repeated opportunities for solving problems through discussion and debate. Thinking means flexible habits so that previous experience without being hardened into fixed ways of thought and behaviour can be reorganised or reconstructed in terms of growing purposes.

Every teacher can add to this list of educational objectives of teaching methods but the most important thing is that he should conceive these objectives clearly and his everyday practices should reveal them.

IV

These and other objectives will determine the general nature of the programmes to be followed in high school. Let us discuss a few of the important features of the dynamic approach in methods and programmes.

In the first place our teaching procedures should be carefully adapted to results we expect from high schools. The newly emphasised functions and purposes of secondary education should be closely studied and discussed by teachers among themselves, with parents, with managing bodies and in public so that all those who are in any way concerned with secondary education should understand the implications and help in the revision of traditional methods. The nature of activities required of students in a school should bear close relation to those expected of them as citizens of a

welfare state. Aims and objectives give direction and zest to our effort, and therefore it is necessary for teachers to have worthwhile aims in teaching. For example if co-operation and mutual helpfulness are to be developed, our teaching methods should not overemphasise competition, rivalry and personal achievement. Or if self-direction, initiative and resourcefulness are desired, students should be provided opportunities for practising and developing these qualities as a part of the regular instruction in schools.

Students too enter upon tasks with greater zest if they know what they have to achieve, and consider such purposes worthwhile. Too often teachers feel that worthwhile objectives are inherent in their courses and activities and are automatically achieved when courses and activities are completed. This seldom helps. If objectives are formulated by teachers and pupils jointly for each course and activity both will know what they want and how they should try to get it. Each pupil will not only understand the meaning and value of what he does but also his interest and capacity in any field of study and work. Such self-consciousness about our efforts and programmes on the one hand, and objectives and outcomes on the other, will make programmes more effective.

Secondly learning takes place best when the learner learns through meaningful experiences, that is actually experiences what is to be learnt. The principle of activity, of learning by doing, emphasises an important truth that the young learner grows by his own efforts and his own real experiences, whether it be skill or knowledge, in appreciation, social feeling or spiritual awareness. It is not what the teacher does to the

pupil or for the pupil that educates him, but what he enables the pupil to do for himself, to see and know, feel and do for himself. His free, happy, purposive activity is likely to result in attitudes of initiative and independence and his absorption in real activities will induce him to put in his best into a piece of real, creative work. Formerly the curriculum was regarded primarily as a body of subject-matter. Such a point of view has been enlarged; the curriculum is also a set of experiences with the subject-matter. The experiences which pupils have or the activities they perform determine to no small degree their interest in or dislike of the subject-matter itself.

The *Secondary Education Commission Report* has stressed the point very clearly:

'Knowledge has to be actively acquired by every individual student through independent effort. The basis of teaching must, therefore, be the organization of the subject-matter into units or projects which would create opportunities for self-activity on the part of the students. These should largely replace the formal lessons which often lack proper motivation and, therefore, fail to arouse real interest. Students can put in their best effort only when the relationship between their life and their lessons is made manifest, for this will create the necessary feeling of interest and provide the requisite motivation. So the business of the teacher should be to re-establish the link between life and knowledge, to share the aims and objects of teaching with his pupils and to plan the programme of work in such a way that pupils will have varied and ample opportunities for self-expression in speech, writing, collective reading, independent research, cons-

tructive activities and other projects that bring the hand and the mind into fruitful co-operation....

This approach also postulates that practical and productive work should find a prominent and honoured place in the school programme.....

This implies that, in the teaching of every subject, opportunities should be afforded for pupils to apply practically the knowledge that has been acquired by them. In Geography it may take the form of drawing maps, making models, illustrations, organising excursions, keeping weather records, constructing in appropriate material scenes from the life of different regions of the world.¹

Too often teachers obsessed with syllabi and examinations think that activities are beyond their reach. It is hardly so. Activities are the things pupils do with aspects of the subject-matter in order to arrive at the educational goals which have been set up as desirable. Activities may take a few minutes as writing a question for a 'question box' or looking up a point in a book of reference or they may take days, and even weeks as going on an excursion or building a model; they may be very general as a project or very specific as writing a slogan. They may be visual such as reading to understand, memorize or enjoy, consulting books, maps or charts or observing pictures, scenes or exhibits or oral such as reading aloud, discussing, reciting or debating or taking part in drama or mock trial; or listening such as listening to music, discussion, radio or, lecture; or drawing such as drawing a map, diagram or chart; or they may be general as hiking, collecting etc. Which of these activities appeal most to pupils of any one age or

¹ *Secondary Education Commission Report*, pp. 105-6.

class level is difficult to say but if opportunities for all such activities are provided pupils will choose according to their interest.

The project method is one name given to dynamic programmes of learning through experiences and emphasises purposeful activities carried on in a lifelike situation. The project presents a challenge, a certain task has to be done, it gives unity to the activities, the purpose guides all effort and provides the motivation. The students make their own plans of work, they themselves formulate a goal and evaluate their achievement. The project method has been more discussed than practised except in a very few experimental schools like the one at Moga. Originally the project method was applied to the teaching of agriculture and home economics and later it was extended to industrial arts and other subjects in the curriculum. The different subjects are integrated in projects and the student is carried from one meaningful experience to another to achieve a definite goal. But the term *unit* is more comprehensive and consists of all those activities and experiences planned by the teacher and students to enable the latter to understand, know, appreciate and do things. It combines the best features of the project method. The purposeful student activities help to unify the subject-matter around problem-solving situations. For example in a large town like Calcutta, students could take up units like the water-supply or the transport system. In planning work the teacher could draw the attention of the class to certain focal points of subject-matter and integrate content from many subjects, but in drawing the general plan of work and executing it he would let the students alone except offering advice

as to where they should seek their material. But the whole curriculum will have to be examined from the standpoint of its actual function in human activities before it can be organized into units of work.

Thirdly the dynamic approach to teaching should afford ample opportunities for effective group work. To improve group participation teachers and pupils should develop a co-operative type of human relationship in all learning experiences and strengthen among pupils a healthy group feeling by —

1. Grouping pupils according to interests, purposes and friendship
2. Helping students to know each other better.
3. Choosing common goals
4. Encouraging students to find ways of helping each other
5. Helping students to solve common problems and share common experiences
6. Developing group discipline and the like.

Students should also have opportunities to evaluate the quality of their thinking and action and to devise ways of improving group participation of individual students.

Group discussion promotes co-operative thinking. Students work and think together on a recognised common problem, each member has to contribute to the discussion and personal goals not acceptable to others are set aside. Common endeavour helps to strengthen group feeling and discipline besides fostering a spirit of toleration and mutual understanding.

Group spirit is very simple, natural and easy. If one student wants to understand anything he should

seek help from his friends in the class. It is a pity that though the school is a community and the class is a healthy stimulating group, the social potential is poorly used and developed because the whole work in the class-room is done mechanically, in a formal manner.

The *Secondary Education Commission Report* aptly points out:

“The genuine training of emotions, attitudes and social capacities takes place best in the context of projects and units of work undertaken co-operatively. It is the give-and-take of shared experiences that brings out the quality of leadership, inculcates habits of disciplined work and takes the individual out of his potentially dangerous mental and emotional isolation.”¹

V

It is obvious that such programmes and methods of teaching will go beyond what the teacher and the textbook can provide. Both teachers and students will have to plan their study and work on a much broader basis and enlist help from several sources and directions. These aids are being considered in greater detail in the chapters that follow and therefore just a bare mention is made of them here:

1. An effective library service
2. An increasing use of audio-visual aids
3. A rich and well-planned programme of co-curricular activities including science, art, craft, debating, dramatic or camping clubs
4. Use of well-equipped laboratories and natural history museums.

¹ *Secondary Education Commission Report*, p. 109.

CHAPTER IX

THE TEACHER

THE TEACHER is the pivot of the educational system and the problem of educational reform and reconstruction is linked with the improvement of the quality of teachers. And yet like the English weather everybody talks about ameliorating the lot of teachers but nobody does anything about it. While bankmen, journalists and dockworkers who were born much later have successfully organised themselves and made society realise their worth and status and the state has intervened whenever there has been trouble, this oldest profession of teaching continues to get mere pats on the back and homilies of an exasperating nature from the state and insults, humiliation and even persecution from society. Dent has put the matter very succinctly:

'I believe that, despite the clouds of uplift which emanate from public platforms (especially when politicians bestride them) about the dignity, nobility, high value and so on and so forth of the teacher's work, in fact far too low an estimate is put upon it by society in general and politicians in particular. Consequently, far too low a standard is set for entry into the profession, the training of the teachers is pitched at too low a level, and the standard of efficiency demanded of him (or her) in his work is altogether too low, in many schools deplorably low, so low, indeed, that it can hardly be called a standard at all. And what there is of standard is the wrong standard.'¹

¹ *To Be a Teacher*, p. 6.

It is strange that a country which swears by moral values neglects educational service which is a major means of inculcating such values. In several states teachers' associations have been organised and some of them have rendered no small service to the profession but they suffer from want of funds and their voice is weak.

At every educational conference, seminar, meeting or workshop almost the first question that is very vehemently raised is about teachers' salaries whether it is relevant or not. So much weighed down are the teachers by economic difficulties! They are told that when industrial and development plans are complete and the country makes more money teachers' salaries will certainly be raised. But while the grass grows the steed starves. The teacher cannot be blamed if he is not convinced. His difficulty is why the same argument is not used for engineers, doctors, bankmen or dock-workers. The reason is not far to see. Education is not yet considered an important and urgent utility service.

On the other hand it is difficult to accept that if teachers' salaries are quadrupled overnight the magic wand will improve the quality of teaching. Lifelong habits of sluggishness, of playing safe with the minimum of annoyance to the authorities, of doing slipshod work, of taking it easy and the like have so corroded the mental and moral make-up of a vast majority of teachers that it will take time before the quality of teaching shows any improvement. So there is a vicious circle.

And yet there is no denying the fact that there are some very conscientious and competent teachers who

will continue to do their best in spite of serious handicaps. At a headmasters' seminar I complimented a young enthusiast and with a visible glow on his face he told me that his father was also a headmaster. Such enthusiasts are rare and the danger is that we may lose this small minority.

The testimony of the *Secondary Education Commission* is emphatic and clear.

'During our tour, we were painfully impressed by the fact that the social status, the salaries and the general service conditions of teachers are far from satisfactory. In fact our general impression is that on the whole their position today is even worse than it was in the past. It compares unfavourably not only with persons of similar qualifications in other professions but also, in many cases, with those of lower qualifications who are entrusted with less important and socially less significant duties. They have often no security of tenure and their treatment by management is, in many cases, inconsistent with their position and dignity. The same story of woe was repeated at almost every centre by the Teachers' Organisations and by responsible headmasters and others interested in education. It is surprising that, in spite of the recommendations made by successive Education Commissions in the past, many of the disabilities from which teachers suffer, still persist and adequate steps have not been taken to remove them. We are aware that, in recent years, in many states there has been a revision of teachers' grades and dearness allowances have been sanctioned. But they have not brought adequate relief, because, meanwhile, the cost of living has risen steeply and

thus nullified the concessions that had been granted. We are fully conscious of the financial difficulties of the State Governments and the fact that they have to attend simultaneously to a large number of other urgent and pressing problems. But we are convinced that, if the teachers' present mood of discontent and frustration is to be removed and education is to become a genuine nation-building activity, it is absolutely necessary to improve their status and their conditions of service.¹

But this gross injustice and these serious disabilities should never be made into an excuse for neglecting one's work and thereby lowering one's efficiency for such a step will be suicidal. A teacher who wilfully neglects his work will soon get into habits which may be difficult to shake off later on. While the teaching profession needs organisation and means of publicity it should not be overlooked that efficient public service is a very effective means of winning public understanding, appreciation and esteem. India has a long tradition of respect for teachers and honest efficient work will help to rehabilitate and revitalize that tradition.

I

Since the new secondary school course has been extended to cover an additional year, it carries with it the responsibility for greater efficiency in teaching and for attainment of a higher standard. Before the old high schools are raised to the higher secondary or multi-purpose status it is necessary to appoint teachers with higher qualifications, that is, with a Master's or an

¹ *Secondary Education Commission*, pp. 155-6.

Honours Degree. In actual practice one year of the Intermediate is being added to the higher secondary school and for teaching each subject, a Master's Degree is considered essential as is done in intermediate colleges. The *Secondary Education Commission Report* recommends that persons employed in higher secondary schools should have these qualifications and possess either a degree in education or at least three years' experience of teaching in a college. Some of the subjects like logic, psychology, economics, biology, technical subjects are being introduced in high schools for the first time and it is necessary that teachers with high qualifications should teach them.

Since products of higher secondary schools will proceed direct to a degree course their preparation should not be confined to a narrow syllabus or a textbook in any subject but should have a wide sweep over the whole area of knowledge. This can happen only under the charge of a highly qualified teacher. That is why education departments in many states have prescribed that either honours graduates or second class post-graduates should be appointed. In some states quite a controversy has arisen whether an honours graduate should be preferred to a third class post-graduate and as in some high schools third class post-graduates have already been working, the anxiety on the part of both the management and the teachers to let them continue is natural. In some hard cases, education departments have allowed them to work on a temporary basis but they are rightly afraid that any relaxation in this behalf will spell disaster for the new scheme which is being mainly introduced for raising existing standards.

In actual practice institutions prefer M.A.'s to Honours graduates and if their choice is limited to Second Class M.A.'s with experience or training or both the supply position is bound to be hard. If they expect candidates to have specialised in some co-curricular activity or the other, games, magazine, N.C.C. and the like they will have to wait long before they are able to fill the vacancies. The supply position is further restricted by the medium of instruction. In most of the higher secondary schools, subjects which are taught and studied in English in universities will have to be taught in a regional language. How many M.A., B.T.'s with experience of one co-curricular activity or the other can do it with confidence and competence? Then there are Hindi-medium schools in Bengal, or Bengali-medium schools in northern India and they have real difficulty in making appointments. Schools in rural areas find it still more difficult and teachers of science subjects are still more difficult to get. It is not surprising therefore that a number of upgraded institutions in some states are going without teachers in some subjects. Even in large towns many institutions have been obliged to employ part-time teachers in elective subjects.

II

It is the conviction of experienced educationists all over the world that far too many people are allowed to take up the work of teaching without any consideration of their suitability. In western countries many studies have been made of teachers' personal and professional qualities and most of them are agreed on what is expected of teachers. This means that the selection of

teachers should be carried out very carefully by qualified and experienced people. Since teaching is a national service of very high importance it is desirable that there should be a permanent selection board in every state and the selection should be done on a scientific appraisal of the personal and professional qualities of candidates. But from the present conditions obtaining in the country it is a far cry.

However an enumeration and discussion of such qualities will help to underline the need and importance of a very careful selection. Some of the qualities which appear in almost all studies are listed below:

- ✓ 1. Adaptability (He should never fall a victim to stereotyped practices but change his methods with the changing circumstances. He should grow with the job)
2. Attractive personal appearance
3. Breadth of interest (interest in community, interest in profession, interest in pupils)
4. Carefulness (accuracy, definiteness, attention to details, thoroughness)
5. Considerateness (understanding other people's point of view, courtesy, appreciativeness, kindness, tact, sympathy, unselfishness)
6. Co-operation (helpfulness, constructive approach, loyalty)
7. Dependability
8. Enthusiasm (alertness, animation, inspiration)
9. Fluency of speech (ability to explain clearly and accurately)
10. Forcefulness (courage, firmness, independence) decisiveness
11. Fairness (impartiality)

12. Good judgment (discretion, foresight, intelligence)
13. Health
14. Honesty
15. Industry (patience, perseverance)
16. Leadership (initiative, self-confidence)
17. Magnetism (approachability, cheerfulness, hopefulness, sense of humour, pleasing voice, sociability, wittiness)
18. Neatness (tidiness)
19. Open-mindedness (freedom from narrow prejudice, willingness to examine and accept new ideas)
20. Originality (imaginativeness, resourcefulness)
21. Progressiveness (ambition)
22. Promptness (dispatch, punctuality)
23. Refinement (good taste, modesty, morality, simplicity)
24. Scholarship (intellectual curiosity, knowledge of subject, devotion to study)
25. Self-control (calmness, dignity, poise, reserve, sobriety)
26. Thrift.

These qualities are listed alphabetically here but it will be helpful if rank lists are prepared not necessarily to pinpoint what qualities are prized most but to highlight what traits among teachers society expects so that teachers may try to cultivate them. A close study of what different agencies expect of teachers will reveal that there is hardly any agreement among them. The Ministry of Education in their countrywide schemes envisage a type of teacher which the parents, the principals, the managing bodies or state education departments neither want nor appreciate. For example,

the managing bodies want window-dressing and for them the most useful and efficient teacher is he or she who through his or her efforts contributes most to the name and prestige of the institution, whose students do well in games, debates or competitions in art, craft or music or who can organise public shows in drama, concerts or exhibitions; the principal wants loyalty, co-operation, punctuality and such other qualities as will help him in administration and boost his prestige; the education departments attach great importance to paper qualifications, degrees and diplomas, and pass percentages (in some states they are almost fanatical about results); parents are not agreed even among themselves as to what they want of the teacher or they want everything from him as they have obliged him by sending their dear ones to his or her care and are paying fees; and our planners have an eye on the type that will promote the ideals of progressive education. A common denominator may elude us for some time to come but there is a promise of synthesis in the increased interest in, and attention to, the problems of quantitative and qualitative expansion and improvement in education, for who can deny that the teacher is, and will continue to be, the heart of the process of education.

III

A sound mind in a sound body is the usual expression of the ideal of physical and mental health but what is connoted by the word 'sound' is not easy to say. Let us try to give it some definite content with particular reference to teachers.

The interest, enthusiasm and activity of the class to

a very large measure is determined by the interest, enthusiasm and activity of the teacher and calls for a high level of physical vigour. A teacher who is strong and active wins half the battle in the class. Therefore at the time of appointment health and general physical bearing should be an important consideration. Teachers' councils in schools should not merely discuss professional problems but also provide for games and sports for teachers so that they keep themselves in good trim. Recreational and cultural programmes organised by teachers should be encouraged and teachers' clubs should be subsidised by the state. Relaxation and mid-day lunch are as important, and in my own school facilities for both are provided. There is a separate rest-room for teachers and community tea for which the institution provides utensils.

Cultivation of dignified posture, gait and voice deserves special attention and for these regular physical exercise is necessary. In dress and appearance the teacher should be smart and presentable. He should look a model of neatness and tidiness.

Teachers usually develop throat and lung troubles and should take care to avoid them through regular habits and prophylactic treatment.

A medical examination at the time of appointment should be considered obligatory.

The mental health of teachers in India needs special study and attention. Some of the widespread mal-adjustments may be listed:

Inferiority complex (ill at ease with people, unfavourable criticism of others particularly fellow-teachers, easily offended by criticism, touchiness,

hunger for praise, dislike for advice, envy, jealousy, hatred, and self-pity)

Lack of interest and faith in work, malingering, maligning heads and authorities, blaming students and parents for everything

Lack of social feeling

Cynicism, suspecting the *bona fides* of a well-wisher and questioning the merit of every beneficial move, dogmatism

Lack of interest and faith in social welfare or progress

Pretentiousness, hypocrisy

Day-dreaming, theorising and arguing for the sake of argument

Lack of purpose or goal in life

It is essential that the teacher's personality, physical and mental, should be attractive. He should wear a smile, have pleasant manners, personal charm and sweetness of disposition. One who wants to be feared by his pupils should join the police. He may be strict, hating untidiness, slipshod work, negligence and the like but he must have the capacity to forgive and tolerate young people.

(The teacher must have developed a philosophy of life. Through intellectual honesty and effortful thinking he should have conceived values and ideals by and for which he is going to live and work,) and to the realisation of which all his energy, ability and endeavour is to be directed. This however does not mean that once he has formed his purposes and goals he should fanatically stick to them. Rather (he should be continually revising and reconstructing his values and ideals in the light of changing environment and times) This is what is meant

by saying that the teacher should have a dynamic personality. His mind should be alive, open to new ideas, endowed with a spirit of adventure, fertile imagination, ready adaptability and resilience.

He must have faith in his work. He must believe that teaching is a worthwhile, respectable and socially useful work. No doubt financial rewards in the teaching profession are poor and there is not much to commend in teaching by way of material advantage yet success in teaching is not possible without genuine and abiding interest in students and their welfare.

Finally teachers should continually examine themselves, their ability, their faults and their achievements so that they may have a fairly objective picture of themselves. They should follow the oft-repeated three rules of mental health:

Know thyself
Accept thyself
Be thyself

Such self-examination and self-knowledge will lead to better self-control, greater mental poise, peace of mind and efficiency. It will help him to know the range of human capacities and to compare his own capacity with those of his fellow-teachers, to estimate his worth more justly and live in peace with his colleagues. Many teachers have exaggerated notions about their worth, expect high praise and not getting any or less feel depressed or frustrated. A more correct self-appraisal will help to restore peace of mind and happy adjustments.

To sum up: teachers must understand their students, how they grow and develop and learn, their

changing needs and interests; they must understand themselves, their abilities and shortcomings, have strong interest in their work and their students and direct their best effort to all that they undertake; and they must understand the changing times, the social, political and economic influences on the thoughts and behaviour of people not only in their own country but also in the world at large.

IV

Incentives and opportunities for professional growth and improvement in teaching are few and poor in our country, and unless this is done quickly, imaginatively and on a liberal scale, all our ambitious schemes of educational development are bound to come to grief. As Tagore says:

‘A teacher can never truly teach, unless, he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame.’

The *University Education Commission Report* has made a pointed reference:

‘It is extraordinary that our school teachers learn all of whatever subject they teach before reaching the age of twenty-four or twenty-five and then all their further education is left to “experience” which in most cases is another name for stagnation. We must realize that experience needs to be supplemented by experiment before reaching its fullness and that a teacher, to keep alive and fresh, should become a learner from time to time. “Constant outpouring” needs constant intaking; practice must

be reinforced by theory and the old must be constantly tested by new.¹

Sri K.G. Saiyidain expresses himself more strongly on the issue:

‘Even in this year of grace 1954, there are many schools which may well have stepped out of the middle of the 19th century and many teachers, inspecting officers and educational workers who may well have had a longish wink in the tradition of Rip Van Winkle. If you talk to them about various educational issues you realise that they have no idea whatever of the contribution to educational methodology and techniques or even to its basic principles made by distinguished educational thinkers and teachers in India and abroad.’²

Quite a number of teachers in high schools pass higher examinations as private candidates, for all Indian universities extend that privilege to teachers, but such individual development is mostly confined to the acquisition of academic degrees. Apart from training, teachers read very little about education and in the absence of self-study and thinking the question of their trying new ideas or experiments does not arise. High school libraries may have some books on teaching but they are rarely borrowed. There may be teachers’ councils in high schools but they seldom discuss problems of education or teaching. Professional interest is very low and so are teaching standards and the prestige and status of teachers. There is a close connection between the quality of public service and the degree of public appreciation.

¹ *University Education Commission Report*, Vol. I, p. 96.

² *Experiment in Teacher Training*, p. 111.

Both the Central and State governments have recognised the need and importance of professional growth and development of teachers and have introduced new schemes for their in-service education. Refresher courses, seminars, workshops, extension services and conferences are being increasingly organised and teachers are expected to make themselves up-to-date, to change their outlook and take to new ideas and methods and to make a fuller and better preparation for their work. All such measures have convinced teachers of the need and importance of self-development but they have reached only a small fraction of them.

Numerous conferences, magazines and pamphlets have helped to intensify professional self-consciousness among teachers, but it is quite obvious that much more has to be done.

It is necessary that high schools themselves should take the initiative and assume some responsibility in the professional improvement of teachers. They can do so at two levels. In the first place school administration should be made more democratic so that each teacher has a share in the determination of conditions under which he has to work. If programmes, policies and activities in the school are decided upon jointly with the co-operation of all they have a much better chance of being successfully implemented. Democratic relations among the staff and group decisions lead to staff co-operation and group participation. If, for example, teachers of English are thrown on their own resources to build schemes of work for the whole year and for each class jointly and if they are called upon to study new syllabi and objectives in English, it will lead to

self-analysis, self-criticism and self-development. There will be much stimulation, inspiration and improvement. They will study, exchange thoughts and thrash out problems of common interest and value. Such activity will promote satisfying human relations and friendliness so badly needed among Indian teachers and encourage and stimulate teachers' professional growth and vitalize school programmes and work.

Secondly there should be inter-school meetings of teachers to discuss educational problems, plans and programmes of work, new experiments being made, common difficulties and handicaps and the like. No doubt teachers' associations are being organised on state and district levels more or less on the lines of trade unions and they take up for discussion only such matters as scales of pay, allowances or departmental rules and circulars. What is needed is a forum for teachers of different schools to pool new ideas on the basis of their experiences and study.

V

A rich social background and varied experience of life and world is always a great asset to teachers. A widely travelled teacher with numerous social contacts and varied experience of fields of work other than his own is a rare thing. What knowledge they have of world and life is derived mostly from books and lacks the vivacity and intensity of living experience. Most of them have never been to the seaside, hills, lakes, development projects, factories, beauty spots or inside a big hotel, assembly hall, parliament house or a high court. Very few have gone out of their state or to the

farthest part of the country. With the new stress on trips and excursions some of them have visited hills, places of historical interest and development projects and even met the Prime Minister. But this is not enough and the number of teachers so benefited is very very small. A few suggestions are made to help teachers in this direction.

In the first place facilities for cheap travel should be made available to teachers in the form of cheap round-the-country tickets so that a teacher in the north can go south and vice versa. To guard against their abuse they may be issued once in three years. Or cheap long-distance tickets may be issued to teachers to travel with families not only to visit places of interest and health resorts but also to live among people of different states and to know and understand their ways of life and problems—their housing, their climate, their food and health habits, recreations, culture etc.

Secondly there should be holiday homes for teachers at all health resorts, both hill stations and seashores, where teachers may stay during the long vacations at reasonable cost. These will provide opportunities for social contacts and exchange of thoughts and experiences with teachers from other places.

Thirdly teachers should be afforded opportunities for work experience in fields other than their own, for example, in an office, workshop, sales departments, development projects and the like. This will not only provide materials for illustrating class-work but also provide a teacher with an understanding of other people's work and associating with them. It will enrich his own life and work.

CHAPTER X

THE SCHOOL LIBRARY

LIBRARIES are the wardrobes of learning from where students may take out knowledge for both use and ornament, for the solution of practical problems and for the cultivation of mind and intellect. Young people's desire to know and inquire is always keen and the school library helps to keep active and strengthen young pupils' desire to learn and know more. With the new objectives and methods of teaching the traditional practice of exclusive dependence on one or two textbooks is giving way to the tendency to supplement the textbook with several other sources of curricular materials which also have a contribution to make to the education of the pupil. The radio, the cinema, the press and several areas of community living have their own role in education but the central source of information for both pupils and teachers is the school library. With its collection of reference books, standard books, books of general interest, magazines, newspapers and other types of reading materials the school library will not only serve to add to what the teacher and the textbook teach but also help to widen the mental horizon of the pupil by providing in every field many books other than textbooks, books treating the subject in greater detail and often from a more interesting angle, books giving specific information and books offering delightful leisure-time reading. Teachers too may add to their knowledge, obtain new applications of old ideas and enrich their work in and outside the classroom. 'A textbook usually adopts a specific approach

conveying information and knowledge as systematically and briefly as possible. Such an approach has its own advantage but it cannot provide adequate training for the growing mind of the adolescent which often craves for a wider and more challenging presentation and appreciates contact with more creative minds than textbook writers are generally gifted with.¹ Often the textbook is too concise and fails to give thorough understanding of the subject, instead of sharpening the curiosity of the pupil it weakens his desire to know more, and the school library providing several books for supplementary reading in which many topics are more fully elaborated or more clearly explained will help teachers and pupils to make good this deficiency.

The library supplements class-teaching. In teaching selections from a book the teacher may inspire pupils to read the entire book in original. In subjects like history and geography they may be referred to famous biographies and travel books. Such suggestions to be effective must be made with strong emotional appeal, so as to fire the imagination of young people.

In the new approach to teaching and learning we are laying increasing emphasis on activity methods, on units of work, group work, co-curricular activities and the like, and these postulate the existence of a good, efficiently functioning library. The library may well be regarded as the essential instrument for putting progressive methods into practice. Besides, the curricula and the programmes of work and activities will have to be continually revised and reconstructed, and the school library providing a fund of new material treated from new points of view will offer the necessary

¹ *Secondary Education Committee Report*, p. 110.

impetus and inspiration for such revision and reconstruction. A trip is being organised during the vacation and questions such as what places should be visited, what route is to be followed, what historical, geographical and industrial sights should be seen and the like will have to be tackled. It would be better if pupils are encouraged to study relevant material on the subject under the guidance of teachers and then chalk out a detailed programme after a detailed discussion together. The celebration of the anniversary of a great leader should send them to the library to search for necessary material on his life and work. Indeed in a progressive school so numerous are the occasions when pupils can be sent rushing to the library on errands of study, research and investigation that the school library becomes a veritable nerve-centre of the life of the institution.

The increasing use of the library in schools helps to develop among pupils a spirit of self-help and self-reliance in learning and study. And by allowing young people to browse freely in the library the teacher can find out the special interests and aptitudes of his pupils.

The school library helps both pupils and teachers to utilize and enjoy their leisure. The reading habit once formed in school days helps to make life worth living in later years.

The importance and value of a good school library is no longer in dispute. Rather the issue before us is how to expand the facilities available in school libraries and ensure their increasing use. That is why in all progressive schools the library is getting the lion's share of grants and several state education departments insist on certain minimum provision in library equip-

ment as an essential precondition for recognition to be followed by regular grants for additions to the library. The Central Ministry of Education have followed up their grants for multi-purpose schools with grants for libraries in consonance with their strong plea that a school library can play an effective part in the improvement of secondary education and no functional teaching is possible without a large provision of reading material in school libraries.

In a vast majority of high schools, particularly in rural areas, there are hardly any libraries worth the name. Some odd and old books are graciously presented to the school by its well-wishers because they cannot be anywhere else and lie undusted and unused in ramshackle almirahs in some unusable room in the school. They are 'generally old, outdated, unsuitable, usually selected without reference to students' tastes and interests.' In some schools a few shelves are placed in the headmaster's room and go by the name of the school library. They are seldom opened and the use of what books there are is discouraged because that will mean additional work for the already overburdened teacher. Often the teacher-librarian tells the students to concentrate on their textbooks and not fritter away their time and energy in reading books from the library. A few books read intensively are more useful than a number of them read cursorily for pleasure, and the textbooks presenting carefully selected and organised material that is most relevant for examination in a clear and concise manner should be the sole concern of students. This approach is characteristic of many front-rank students and teachers whose sole aim in school is to score credit and distinction in public

examinations. In one school library not a single novel was to be found because the president of the managing committee believed that novel-reading is bad for character. The stock of books in several school libraries is scanty and haphazardly selected.

Our problem in organising library service for schools is twofold:—

- (1) How to expand facilities in school libraries, so that they function as the nerve-centre of the school programme and supply adequate resource-material for all items and units of work.
- (2) How to ensure its maximum use, so that both teachers and students develop a strong reading habit, a habit of reading for pleasure and for seeking information to solve their problems and to meet their needs in several types of activities and projects.

I

In the first place the library must be made the most inviting place in the school, so that it is a pleasure to sit and study there. It should be housed in a spacious, well-ventilated, airy and bright room furnished with an eye on both attractiveness and comfort. The furniture should suit the needs of students and some reading material should be readily and always available even if it consists of magazines and journals. The room should be given a homely look by hanging pictures on walls and placing flowers here and there. In one school library in Bengal paintings and statuettes of Tagore, J.C. Bose and Raja Ram Mohan Roy gave atmosphere to the reading room.

Pupils should have free access to the books in the library so that they can handle them freely. This is why the open-shelf system should be introduced wherever practicable. This system has been introduced in some public and college libraries in India and some loss of books has been reported. But such losses should always be considered against the great benefit which users derive from the system. Without this system there can be no browsing and the reading habit cannot be effectively developed. But this system should be gradually introduced with caution and certain safeguards. The library room should have only one entrance where pupils should leave their own books with an attendant before entry. The seat of the librarian should command a view of the whole room and definite rules should be framed for taking out books from the shelves, as for example, pupils may take out books from shelves but leave them on the table, so that the librarian replaces them properly later. Such a library service can be efficiently organised only by schools financially well-placed.

Before the open-shelf system is introduced the principal and the staff should make an emotional appeal to the students that the library belongs to them and any damage or loss should be regarded by them as their own. Until a duly qualified whole-time librarian is appointed, the open shelf-system should not be tried.

Usually there is enough time in a school time-table to go to the library. Even the provision of a library period for each class per week is not enough. The library should open one hour earlier and close one hour later than the school for the convenience of pupils.

Some schools keep libraries open much longer. Such a practice ensures a larger use of the library.

During the library period, while quiet and order must be enforced as a part of the general library administration, there should be a provision for pupils to sit in small groups and discuss what they read without disturbing others. Often a pupil would like to share the joy of what he has read by reading it to others or inviting them to read the same or to make comments on it. Such facilities should be available and the earnestness of pupils should not be unnecessarily curbed in the interest of dead silence. Such library periods should be carefully supervised to ensure that every pupil is making the best possible use of it and the teacher should go to the help of those who are unable to decide what they should do. In every class a few pupils are not at all interested in reading and a wise teacher will draw them together to show them some good books or magazines. Travel books, illustrated books about big towns like London, Calcutta or New York or about places and people in different lands have often worked wonders in arousing the interest of such pupils. But the teacher should never forget that the range of interests among pupils is very large and his supervision and help should take them into account.

A catalogue of library books should be available in the library for ready reference. Every pupil should be provided with a card or pass-book in which the names of books issued to him should be recorded.

II

Though the value and importance of a school library

has begun to be generally appreciated in a large number of schools no systematic attempt is made to teach students how to make the best use of the library. The library and the librarian are there and that is all there is to it. The students must find their way as best as they can. It is very rare for teachers to take new students to the library and show them what books are there. No doubt in many good schools they soon come to know about the library but a well-planned programme of taking students to the library and showing them some really good books is not without a value of its own. No doubt students make a good use of the library but many more shun and avoid it often for the very simple reason that they do not know how to use it. In many cases teachers themselves seldom make use of the library, and how can they be expected to teach their students what they themselves have not yet learned?

It must, therefore, be accepted at the very outset that the right use of the library has to be deliberately and systematically taught, and that in a programme of expanding and increasing library service in schools the value and importance of libraries in education should be brought home to students and efficient methods of using the library should be explained. Library rules, how to borrow books, how to use a book, how to use a reference book, how to use a magazine or newspaper, some good books in our library, the books I like most, selection of books for the long vacation, how the library can help class-work are some of the important topics which should be discussed in detail by the librarian and the teachers to stimulate a larger and more intelligent use of the library. If the libra-

rian takes round a few pupils to show them the location of various classes of books, explains to them how to obtain materials from different types of books, discusses with them their needs and interests in books and is generally eager to rush to their help the library will be a busy place buzzing with activity. Now and then the librarian should meet a dozen students who in his opinion make the most effective use of the library, talk to them about some big libraries and if possible accompany them to a big library. In a large town like Calcutta such a visit to the National Library may be held out as a prize and honour for the studious section of students. Or they may be taken to a big book store.

Attention of students may be invited to new additions to the library by displaying them on a separate shelf marked 'New Books', by putting up their jackets on a special notice-board, by maintaining a file of such colourful jackets and showing them to all who visit the library or by notifying lists of new books on the board. Such captions as 'Have you Read This Book?', 'Here Is A Book You Must Read' prove very helpful.

Books may also be reviewed from time to time in the school magazine. These may be old or new books. Such reviews should be brief and pointed concerned mainly with how the book has interested the reader. Sometimes readers may be invited to put down a list of four most interesting books they have read and the names of books which score the highest votes and the names of students who selected most of them should be published in the magazine or announced on the board or in the morning assembly.

Like *Parents' Day* a *Library Day* may also be organised once a year to popularise the school library.

A display of new books, periodicals representing different interests, such as fiction, biography, history, geography, science should be arranged in a separate spacious room. Students on that day may read out stories and recite poems from books taken from the school library. Some distinguished person may be invited to preside over the function and speak on the usefulness of a library. Students may read out appreciations written by themselves of particular books. A few prizes may be awarded to those who have made the best use of the library or those who have read the largest number of books should be given an 'honourable mention' or entered in a Roll of Honour. A list of books most widely read may also be displayed. Students and guardians may be requested to make gifts of books to the school library on that day. Coupons or flags may be sold on that day to collect funds for the school library and indirectly to popularise it. It would be better if this *Library Day* is celebrated early in the session.

Every school should organise class libraries. As an adjunct to the general library it can render very useful service to pupils. One of its advantages is that it can be easily organised. It can be run by pupils themselves, a student-librarian being elected in every class. It is desirable that the class-teacher should make a careful selection of books suited to the needs and interests of his class and should remain in the background. If a beginning is made with enthusiasm, the class library will do within its limits almost as much good as the general library itself. It should be continually fed from the general library. The exchange of books between different classes can be made with advantage. It will thus offer within the four walls of the

class-room 'an intellectual fare spread before them'. Pupils should also be encouraged to present books to their class libraries. In one school some classes had given distinctive names to class libraries with their own rubber stamps. Scrap books can also be placed in class libraries.

Besides class libraries there may be subject libraries. They will be of special advantage in a multi-purpose school with several streams of courses. Books on physics, chemistry, biology, commerce, economics, geography and the like may be specially selected by subject teachers and issued to students according to their needs. In most of these subjects only the syllabus is given and a number of books are recommended. In any case students are expected to study more than one book. But they are not able to purchase them. Sometimes teachers recommend a number of books and ask students to purchase different books so that they can read more books by exchange. But if there are subject libraries of even a dozen books on each subject students will have the advantage of reading more books on every subject. These collections may lie in the general library or be placed in charge of the subject teacher who may also guide students how to make the best use of them. He may also indicate what topics are best treated in different books. Students may also be guided to prepare their own notes after reading a number of books.

Within the school library there should be a special collection called the *Textbook Library*. This collection is to include textbooks of all classes of the school. It is essential to have textbooks on the same subject by different authors as well as several copies of the same book. The *Textbook Library* can be enriched if out-

going pupils can be persuaded to present some of their used books to the library. Specimen copies received from publishers may also help in building up this section of the library.

The *Textbook Library* will be of great help to both teachers and brighter pupils of the senior classes. It will also help the needy pupil. Such a library is absolutely necessary in the multi-purpose schools where there are no prescribed textbooks on many of the subjects.

III

The success or failure of a library depends to a large measure on the proper selection of books. The number of books that are produced every year easily runs into millions and of course every book is not suitable for school libraries. The school authorities must select books with great care examining each from the point of view of the needs and interests of young pupils. There are some books which are absolutely necessary like a couple of good dictionaries in English, Hindi and the mother-tongue (for those whose mother-tongue is not Hindi), a few encyclopaedias for reference — one general and some specially written for students, grammar books, books on history, geography, general science, biography, fiction and the like, some newspapers, magazines and other materials. Books should be both instructive and enjoyable and should cover a wide range. The entire collection should be proportionately distributed over various departments and subjects and must cater to every taste, need and type of ability. Of course the curricular needs will have to be kept in

view and the special courses provided in the school must receive greater attention in the library. Also the collection must keep in view the different age levels of pupils in the school. If there is a junior section a good proportion of books must be provided for them.

This means that the selection and purchase of books should not be made in a hurry. It should be spread over the whole year. The proportion of books of juvenile interests should be higher than that of other books. In purchasing books their get-up and durability should also be considered.

Facilities for the selection and purchase of books are largely available in towns but in outlying districts high schools have great difficulty. Many of them depute a couple of teachers to large book-stores in big towns and they make the selection from what stocks are available. To help such schools education departments in several states have circulated lists of suitable books for multi-purpose schools. But such lists should be only recommendatory and not mandatory otherwise all high school libraries will be too standardized. If every secondary institution is to develop its own individual tone and atmosphere every high school library should be a law unto itself, selecting its reading materials and organising its service to suit its own needs.

Many publishers take pains to draw lists of books suitable for different courses in high schools and with the introduction of the multi-purpose scheme such lists have been circulated to high schools so upgraded. They provide a very useful basis for selection. With little cost it is possible to obtain from publishers books

on approval. Unfortunately the All-India Council for Secondary Education which is doing a number of things to improve secondary education has abstained from drawing a comprehensive list of books from which schools may select. In India the official selection of books is so frightfully tangled with vested interests that any attempt in that direction is liable to be looked upon with suspicion so much that even justifiable attempts are avoided. And the new multi-purpose schools are compelled to shift for themselves. The difficulty is very genuine if, for example, we consider the plight of Hindi-medium schools in Bengal and Bengali-medium schools in other parts of the country. Whatever is available has to be accepted irrespective of its quality.

In selecting magazines and journals for subscription in the school library both recreational and subject interests should be kept in view. After independence, magazines and journals have cropped up like mushrooms but this increase has made possible a wide choice and some really worthwhile reading material has been made easily available. Many of them have been placed on the list of magazines approved by education departments for use in high schools but there is a dearth of travel and science magazines and those schools which can afford foreign magazines subscribe to them. Their excellent get-up and illustrations enhance their educational value. They provide very helpful material to supplement class-work.

Every school must subscribe to one or two dailies. In almost every regional language there are some good newspapers.

Besides the Government of India is publishing a

number of very useful magazines both recreational and instructive, and they are cheap too.

IV

There is no denying the fact that a vast majority of school libraries are very poorly equipped and need continual nourishment through funds. The government has given them a start with lump-sum grants but that is not at all enough. The schools cannot charge library fees from students for already there are many 'extras' and the parents resent the rising cost of education. In some cases donations have helped. In one school they charged a library deposit and spent fifty per cent of it on books in the hope that the annual refundable amount to outgoing students will be met from receipts from new admissions. It is almost pathetic how headmasters are obliged to scrap funds for this dire need.

This need could be met if there were well-equipped general libraries in every district town to which school libraries could be affiliated for periodical renewals and guidance. In several countries the school library is a branch of the public library and the public library lends its resources to the branch. A network of public libraries may solve the problem. If they are not affiliated to school libraries they can at least lend magazines, books, films and records to schools through individual teachers. Or they may provide materials for professional study, have a students' section or reserve certain days or hours of the week for schools. In any case the situation calls for urgent and well-considered plans for extending and improving library service in high schools.

V

In view of the growing importance of the school library in a progressive high school a whole-time trained graduate librarian should be employed. But where is he? So long as this is not possible, a teacher specially interested in books and children may be placed in charge of the library and he should have a special allowance. In fact in smaller high schools the appointment of a whole-time librarian may not be feasible and the education departments of states should arrange short-term courses for teachers in organising and managing school libraries. Such teachers should have a lighter teaching-load, so that they can devote some time daily to the library.

In larger high schools with an enrolment of 500 or more a full-time librarian is necessary. Apart from his training the librarian should have certain important qualifications. He or she should have a wide range of interests and acquaintance with many subjects. He should also possess a working knowledge of the several branches of the subjects and courses being taught in the higher secondary section, so that he can render useful advice to both teachers and students in the choice of their reading material. He himself should have read widely.

Besides he should be a very genial personality, with an eager desire to help and encourage young readers to make greater use of the library facilities. And he should be very willing to co-operate with all teachers in making the library service as effective as possible. In a way the librarian should be a better person and a better scholar than an average teacher and there is

some weight in the argument that a librarian should be more highly qualified and should have a better status and pay than an ordinary teacher.

But trained and qualified librarians are in short supply and unless the education departments start in-service training courses the demand is not likely to be met. Those school authorities who can afford should get one of their own teachers trained.

The librarian should be assisted by a strong and small committee of teachers and the headmaster in selecting books and magazines, drawing reading lists and organising facilities available in the library. The reading-room where only magazines and newspapers are available should have a committee of both teachers and senior students to manage it. The attention of readers should be invited to important items in the newspapers and magazines, and the librarian should make a note of important articles in magazines for future reference by teachers and students. The more resourceful and co-operative the librarian is the more efficient and effective will be the library service in the school.

CHAPTER XI

CO-CURRICULAR ACTIVITIES

WITH a wide range of aims and purposes of secondary schools and with a wide variety of talents, aptitudes and interests among adolescents who join them it becomes necessary that school programmes should not be confined to reading and writing in class-rooms but should extend to other activities outside the class-room like speaking, singing, drawing, playing, acting, collecting, hiking, entertaining and the like. As the *Secondary Education Commission Report* observes: 'We would like the school to see if it can provide a richly varied pattern of activities to cater to the development of their children's entire personality. It has to formulate a scheme of hobbies, occupations and projects that will appeal to, and draw out, the powers of children of varying temperaments and aptitudes. It is not merely a place of formal learning whose main concern is to communicate a certain prescribed quantum of knowledge, but rather as a living and organic community which is primarily interested in training its pupils in, what we have called, the gracious "art of living". Knowledge and learning are undoubtedly of value but they must be acquired as a bye-product of interested activity, because it is only then that they become a vital part of the student's mind and personality and influence his behaviour.'¹

Many of these activities like debates, sports, games, school magazine, clubs and dramatics have always been a part of the school programmes but they have

¹ *Secondary Education Commission Report*, p. 217.

always been considered as a decorative frill and called *extra-curricular*, outside the field of serious and important curricular work. Most parents and teachers considered them wasteful of time and energy and at best some of them only tolerated them. Today they have grown in number and importance and are considered no less important if not more important than the class-work of teaching and learning. Therefore, they are called *co-curricular*. With the new concept of the curriculum as the sum-total of all experiences and activities provided in the school, these activities have indeed come to be looked upon as part of the curriculum itself. And they have a significant contribution to make in the realisation of our aims and purposes in high schools and in the growth and development of the adolescent. Often participation in debates and students' councils and writing for the school magazine have improved the thought and expression of students to an extent to which class compositions could not have done. That is why all who take a progressive view of education have come to accept that such activities if properly organised and supervised have a vital and important role to play in the school programmes and have an educational value which is beyond the scope of class-room work. They provide a type of educational experience which neither the class-work nor any other educational agency like the home can provide. When students participate in activities under the guidance of teachers they learn new lessons in responsibility for planning and directing their own enterprises and in exercising initiative and freedom and in self-evaluation.

These activities arise spontaneously from the interests of pupils who often prefer them to class-work or success

in the examination and these interests can be used as springboards from which pupils can be helped to jump to worthwhile goals. Suitably guided these interests can be used to vitalize and socialize class-work and stimulate pupils to closer study of subjects.

Since co-curricular activities and regular class-work are both means to a common end they should supplement and reinforce each other. Curricular work is enriched as these activities serve to make it more interesting and practical. As each subject makes a distinctive contribution to the curricular work so each activity serves a purpose of its own in the overall programme of a secondary school.

I

There are various types of co-curricular activities. A list of such activities is given here though it is by no means exhaustive and selection may be made from each type according to the needs of pupils and the resources of the school.

A. Physical Activities

1. Games of all kinds, sports and athletics
2. Gymnastics
3. Mass drill and P.T.
4. Swimming
5. Rowing
6. Hiking, excursions, trips, camps
7. A.C.G. and N.C.C.
8. Gardening
9. Yogic exercises

B. Intellectual Activities

1. Literary and debating societies
2. Study circles, clubs or groups
3. Speech-making and recitation
4. Story-telling, story-writing and essay-competition
5. School and class magazine
6. News service and wall magazine
7. Subject clubs like Historical society, Geography club, Science club

C. Cultural and Recreational Activities

1. Dramatic society—play reading and play acting
2. Art club with drawing, painting, clay-modeling, papier-mâché, fretwork, photography
3. Music group
4. Hobbies club for woodwork, leatherwork, book-binding, collecting coins, stamps, feathers, leaves, insects, pictures etc.
5. Celebrations, festivals, anniversaries of eminent people, national days
6. Museums
7. Exhibitions

D. Community or Social Service

1. Scouting, guiding, Bratachari
2. St. John's Ambulance, Junior Red Cross
3. Nursing and sanitation society
4. Literacy campaign society
5. Epidemic fighting squads

6. Fire-fighting squads
7. Students' committees for maintenance of discipline and order in the school.

These are the common types but to them may be added such as are called for in schools with individual programmes like mid-day lunch league, cafeteria board, managing committees for running a school bank, post office or a co-operative store, folk dancing, cartoon drawing, school band, riding. The list can be easily enlarged by having a club for every need and interest of students.

Now the question arises: how many activities should a school have? Do we have too many of them or too few at present? The practice varies from school to school, some having too many and some too few. It will be our task in this chapter to indicate some of the considerations which should help school authorities to organise an effective programme of co-curricular activities.

II

Most schools recognise the need and value of co-curricular activities but are not able to secure the interest and co-operation of pupils, teachers and parents. It is mostly because their programmes are not well planned and a few activities are started in a haphazard manner. Let us consider some of the essentials of an effective programme of co-curricular activities in a secondary school.

Perhaps the foremost point to consider is the location and surroundings of the school. A school in the heart of a big city will have a programme different from one

situated in a village, factory area, refugee camp or in the suburbs of a town Opportunities for community service, resources and conditions vary with location and must be taken into account in planning a programme of co-curricular activities.

Again building and open space or equipment and material available will be an important determining factor. If a school has no hall, no place where boys can hold assemblies, or no playgrounds as is the case with most schools in big towns, its programmes will differ accordingly. Similarly several schools cannot afford costly games material, science apparatus, musical instruments or audio-visual aids like magic lanterns or projectors. They will have to forego activities depending on the use of such equipment and material. No doubt Education departments are insisting on a certain minimum but too often that minimum proves inadequate.

Every activity requires for its success a special interest and talent in the teacher-supervisor. If teachers in a school have no talent or interest in speech-making or magazine writing it will not be fruitful to organise debates or to try to bring out a magazine. It is particularly true of art and music, of games and dramatics. Not only should there be teachers interested in these activities but there should be enough of them. Understaffed schools can ill afford to run varied co-curricular activities. And above all the headmaster must be a man of varied interests in many fields and if he has no talent and ability for some activities he should at least be able to appreciate good work in them and stimulate the interest of students and teachers.

The type of students who form a large majority

in a school will also be a decisive factor. The rural school drawing students mostly from agricultural families, the expensive urban school drawing students from the business community, a government school drawing students from official classes or a girls' school drawing students from upper, middle or lower classes will all have different programmes of activities. If school programmes are to be integrated with community needs, if they have to consider the home background of students, the economic or social standards of their families, only those activities will be initiated and organised which have a ready appeal for parents. Gardening, craft-work, hiking, co-operative farming, games and wrestling will appeal in a rural school and may neither be possible nor favoured in a big town. But children differ in aptitudes, interests and talents and even in these schools the talents and interests of individual students may over-ride the consideration of class. A student who has a flair for speaking and writing or for drawing and painting or for music will not only draw an audience but also stimulate interest among his close associates and become a nucleus of group activity. The school will do well to utilize such an opportunity for promoting worthwhile activities.

Some schools do not really have time for co-curricular activities. In large towns and villages where students have to travel or walk long distances to the school, they cannot afford to stay after school for such co-curricular activities and the school must rest content with such activities as can be arranged within the school time.

But before an activity is started its attainable aims and objectives should be carefully formulated and its

educational significance should be clearly understood. Confused thinking regarding the aims or wrong aims have often led to failure and frustration among teachers and students. Too often plays are staged or magazines are brought out not because there is an enthusiasm among students for acting or writing but because the school authorities are anxious to create a public impression or do window-dressing. Such activities as have wrong aims need constant feeding from teachers and fail as soon as that support is relaxed or weakened. But if both teachers and students are clear about their purpose and have faith in its realization the activities will continue to progress and improve. Like effective teaching a programme of co-curricular activities must have clearly conceived objectives in terms of the needs and interests of pupils. If needs and interests of students are not met that programme is doomed to failure.

Co-curricular activities are designed to contribute to the all-round growth and development of all boys and girls of the school and therefore the programme, in the first place, should have sufficient variety to provide for the varying interests of each individual pupil and should be flexible enough to suit their changing and growing needs. In a comprehensive programme pupils of different age levels and interests should find something suitable and worthwhile to do. Secondly the programme should be carefully balanced and no activity should be over-emphasised at the expense of others. In a number of rural schools physical activities monopolise the whole programme as in a number of urban schools indoor activities like debates, art, music or dramatics are all the fare served. This should be remedied as far as feasible. Too often a small band

of students run every kind of intellectual activity, the same names are found in debates, magazine, drama and recitations. Another small group is found in every team, in all games and sports. Care should be taken that there are a sufficient number of activities and that all students take part in one activity or the other. There are always some students who need a certain type of experience but shrink from it. These should be specially encouraged to take part in those activities which will provide that type of experience. The shy diffident back-bencher should be given assignments in recitation to begin with and later persuaded to speak in meetings of students in and outside the class. Likewise the role of leadership, of bearing offices in committees and councils should go by rotation so that different individuals have the benefit of that experience. In many institutions there is a rule that a student can hold office only for one term and can hold only one office at a time. This enables other students to come forward and gain useful experience.

The programme of co-curricular activities should allow ample freedom to students to exercise initiative, to make decisions, to draw plans and carry them out, and to evaluate their achievement. One of the major objectives of the programme is to give young people an opportunity for self-direction, to explore and discover their interests and talents, to help them to be active and creative and to experience the joy and satisfaction that comes from accomplishing things which one has himself planned. Pupils' participation in such activities should afford them spontaneous pleasure.

The programme should be so organised that young people have opportunities for working in varying

groups, small, big and all-school assemblies. For example they may discuss issues informally with four or five friends in conversation, in a small section of the class formally as if it were a committee or in a bigger group like the school union. Each group gives a different experience and calls for a different approach and technique in presenting one's arguments. Dribbling a football in a corner of the playground with two or three friends, playing in inter-class matches and representing the school in tournaments, all are useful in their own way. And every school should provide ample opportunities for participating in co-curricular activities in both small and big groups.

Programmes of activities should be planned very much in advance, so that both teachers and pupils have enough time to prepare their part in an activity. It would be better to have a calendar of activities term-wise, quarterly or even for the whole year. Programmes should never be arranged in a hurry or at a pinch nor should half-hearted efforts of students be accepted. Carefully drawn and seriously prepared programmes will call for the best and the utmost on the part of all those who participate and achieve better standards which may grow into a worthy tradition in that school.

III

Let us consider some of the educational values resulting from a rich and varied programme of co-curricular activities. There is a general agreement that they are worthy of a prominent place in the life and work of a secondary school because they not only

meet the basic common needs of adolescents but also contribute to the realization of some of the main objectives of education. It is often argued not without justification that properly guided, many activities have greater value than some of the school subjects. We may, however, point out some of the specific outcomes of an effective programme of activities.

(1) Co-curricular activities help to make the task of teaching and learning interesting, meaningful and happy. With many opportunities for self-direction and self-activity pupils apply much of the knowledge and ability they acquire through formal class-room work to practical problems, their urges and interests have a free expression and they experience a new joy in doing things on their own initiative and in their own way. Much of the boredom incidental to serious work in the class is offset by co-curricular activities offering zest and pleasure. Their energy is directed to new tasks and they acquire a sense of responsibility and discipline, and love for, and devotion to, work. Helping to acquire such an approach to life and work, co-curricular activities will provide a strong antidote to delinquency and anti-social behaviour.

Debates, group discussions, question box, library days, magazine writing, science clubs, history or geography society, trips and excursions, dramatics help to extend and enrich pupils' experience in various fields of human knowledge. Class study acquires a new practical significance and a strong foundation is laid for living and abiding interest in different subjects.

Through group work, shared responsibility, co-operation and mutual helpfulness young people acquire important personal qualities like initiative, resource-

fulness, courtesy, mutual understanding and sympathy, mental poise, self-confidence and courage. Thus co-curricular activities are effective venues of character training.

As group-work like assemblies, students' unions and councils are democratically organised it promotes loyalty to the group and the institution and helps to cultivate qualities, understandings and skills necessary for effective membership and leadership in a democratic society. Co-curricular activities provide education for citizenship and for sensitivity to community needs and problems. Social service projects serve to arouse interest in the problems of the larger community or nation of which they are a part.

Co-curricular activities provide education for leisure. The abilities and skills necessary for a wise use of leisure are acquired through a programme of wholesome recreational activities, physical, social and mental. Since personality is greatly influenced by recreational activities and a wise use of leisure of which people have an abundance these days, co-curricular activities' contribution to the development and enrichment of human personality is easily very effective and vital. No doubt opportunities for amusement and recreation outside the school are available in plenty but they are mostly mechanical and commercialised. And some of them are not approved as healthy for young people. In large towns adolescents are prone to develop abnormal interest in films, gossip or mere dawdling. If secondary schools could provide them with wholesome recreations they would wean them away from harmful after-school occupations.

A varied programme of co-curricular activities helps

pupils to know themselves. Trying their ability and talent in some varied fields they come to explore and discover their special interests and aptitudes. Soon do they find out whether their interest lies in outdoor life and physical activities, in creative work of art and craft or in music, and in what field they can do better or even distinguish themselves.

This self-discovery and self-knowledge will tell them in what direction they should turn their ability and talent to advantage and help them to make wise vocational choice. They can test their abilities in various fields of human endeavour like speaking, writing, debating, acting, singing and make up their mind about their future. Group work will help them to acquire attitudes, understandings and skills necessary for vocational success.

From these outcomes it is obvious that the contribution of co-curricular activities to education is very large and important and they should form an integral part of the programme of every secondary school. It may be argued that altogether too many values have been claimed for these activities but life, education and personality are wide and variegated fields and their growth and enrichment calls for a wide variety of activities and interests. In fact the wider the range of interests the richer they grow.

IV

What is the role of the teacher in these activities? If pupils are to be allowed the maximum possible freedom and initiative in organising their programmes of activities the teacher's part should be reduced

to the minimum. Of course every activity shall have to be sponsored by one teacher or the other as pupils do not have the requisite knowledge and experience but then he should only guide and assist, and not dominate the scene. He should encourage and give willing and intelligent co-operation, and not order things about. He should work with pupils in a democratic spirit. His participation in the activity will add a new zest to it, adolescents always long to play with grown-ups, but he should participate as one of the group, unobtrusively, encouraging pupils to do better and keeping himself in the background. His direction and supervision should be intelligent and sympathetic. But he must have the necessary talent and skill so that his performance is higher and better than his pupils and they look up to him as a model. If some of his pupils excel him, he should have the courage to appreciate and acknowledge it openly.

The teacher should carefully consider the activity placed under his charge, the educational value, the type of programme to be followed, the type of pupils who can run it successfully, the difficulties to be encountered and the way in which those difficulties are to be met. He should help the clubs and societies to make a wise choice of office-bearers indicating what qualifications are necessary in an office-bearer but he should do nothing to force that choice in favour of any individual pupil. The moment pupils feel that it has been dictated or manipulated by the teacher they withdraw their interest from that activity. When the committee is formed he should meet it very frequently at least in the early stages to discuss and detail programmes. As soon as the programmes get going his

role should be reduced to one of the ordinary members. His advice to individual participants regarding their performance should be given in a most sympathetic manner so as to avoid any embarrassment, bearing in mind that adolescents are very sensitive to even slight praise or blame. In their deliberations he may raise issues, even make suggestions regarding the direction in which their solution lies, but he should never give them ready-made solutions thus sparing them the effort to think, deliberate and decide. Even if their decision is not the best or falls short of what he has in mind, he should encourage them to act on their own decision. He should never forget that the aim of the activity is not a high standard of efficiency but the education of participants, and sometimes even a slightly lower standard of work may be more educational in so far as pupils have themselves, by their own initiative and effort, managed it. The emphasis should be on the effort, initiative and interest of pupils and not on the formal rules and organisation remembering that there is an element of truth in the saying 'What you organise, you kill.' Spontaneous interest of pupils is the keynote of the success of any activity.

In a balanced and comprehensive programme of curricular activities every teacher should be in charge of one activity or the other. When these programmes are being officially recognised as an integral part of the school work, the teacher's association with one or more activities will not only enhance his prestige and improve his status in the institution but also give him closer and better understanding of his pupils, better hold on them. And this knowledge and power will contribute to his success in the class-work as well.

In progressive schools ability to organise one or more curricular activities is one of the conditions for appointment and often those who can train pupils in athletics, games, dramatics or magazine writing are offered higher salaries. Therefore all those who are preparing for the teaching profession should try to acquire proficiency in one or more co-curricular activities. Unfortunately the common run of teachers' training institutions are very slow to recognise new trends in education and offer no facilities for training in the conduct of co-curricular activities. Meanwhile the All-India Council for Secondary Education which is doing very useful work in re-educating headmasters, headmistresses and education officers in their new responsibilities towards secondary education by organising camps and seminars should ask state governments to organise short-term courses through universities and training institutions to give content-cum-method training in co-curricular activities to teachers in service.

Finally the teacher should make as careful a preparation for participation in co-curricular activity as he does for his teaching work. Without such preparation it will not be possible for him to give intelligent and helpful guidance to pupils.

V

When these activities are no longer considered 'extra', when every teacher and pupil is expected to participate in them and when they are treated as an integral and essential part of the school programme, it is argued that they should be closely integrated or co-ordinated with curricular work and their programme

in every phase should be correlated with instructional work. This is a very useful suggestion if it is not pushed to the extreme. It has already been pointed out that such activities providing for greater pupil interest, initiative, planning and responsibility will help to make curricular work more meaningful. They themselves would be better adapted to the aims and purposes of education, and much of the repetition and waste that is the bane of all co-curricular work will be avoided. When every item in activities is to be interpreted in terms of instructional content, when it either arises in the context of class-work or leads to it, it will have to be carefully planned, carried and adjudged. Some time back an abridged version of *The Bishop's Candlesticks* included in the textbook was put on the stage. The plan, costumes, the cast and the stage *décor* were discussed in detail in the class. What enthusiasm it aroused! Not only was the play very well performed but also several obscure and difficult ideas in the play were more clearly understood. Later they were asked to comment on the performance in detail and to write a report for the magazine. Such opportunities are not difficult to find. Debates, speech-making, recitations, magazine writing can be easily correlated with the teaching of English and the mother-tongue.

But this integration is not always feasible. There are some activities which it would be silly to try to integrate with the curriculum fully, as for example games like football. There are others which touch too many subjects, like the magazine. If a close integration between curricular and co-curricular work is to be achieved every activity shall have to be provided in school time which is not possible or even advisable

under the present conditions. Of course there will be clubs for each subject and the syllabus will be organised into units of work or projects but such a programme will need conditions which at present are not available in most of the schools. However the general principle of integration should be kept in view and it should be practised whenever and wherever feasible.

VI

How far the community should participate in co-curricular activities of the school? It is commonly appreciated that these activities provide a very helpful forum for parent-teacher co-operation and parents should be frequently invited to see their sons and daughters participate in games, dramatics, debates, craftwork. They will see in what directions the special interests and aptitudes of their wards lie, and their encouragement and sympathy will help the young to do better. Usually parents are invited to annual prize distribution functions but that is not enough. There may be many parents who have a talent for one activity or the other and their contribution will not only raise the standard of pupil performance and give them a model which teachers may not be able to provide but also it will give young people a new zest. Adolescents' hunger for appreciation is very strong and adult participation in their activities not only stimulates them to do better but also gives them a feeling of self-assurance which is very valuable. Frequently star players, actors and eminent people in different walks of life should be invited to participate in pupil activities, but as with the teacher so with the outsider the too common tendency

to show off and overawe young people should be scrupulously avoided.

Old students who distinguished themselves in any activity may be invited to join now and then. A Father-and-Son Party where fathers describe their schooldays would be an enjoyable function. Career talks by parents and other eminent people should also be arranged. A bank manager's talk on how a bank works and a subsequent visit of commerce students to the bank proved both instructive and interesting.

VII

Let us consider some typical co-curricular activities.

Magazine

Quite a number of secondary schools have a magazine of one sort or the other. Some publish it annually, others quarterly or bi-annually. Some have a monthly bulletin, others have hand-written class magazines. The practice varies from school to school but the crucial thing is how far students are encouraged to write and if there is a graded plan to encourage them.

Let us consider how it is being done in some good schools. In the primary section children are asked to prepare scrap-books wherein they write out as neatly as possible some of the nursery rhymes they know and illustrate them either by clippings from picture magazines or by their own drawings however sketchy they are. Some of these scrap-books may be exhibited in the school museum.

In the middle section pupils should have their collections of short stories, poems and anecdotes which

they may illustrate with clippings, scrap-books containing photographs of places visited, diaries of trips and excursions, interesting things heard and seen, biographies of eminent leaders whose birthdays or anniversaries are celebrated in the school. Often there is a fund of material for these items available and the teacher has only to suggest how to select it. Some interesting items from these collections may be included in the printed magazine of the school. Pupils at this stage can also be asked to describe in their own words some of the well-known stories in other languages.

Creative writing can be introduced at this stage but the teacher shall have to do a lot of bringing out through suggestions and discussions. He may read out in the class some interesting stories and later may ask them to complete a half-told story or even to make up a story about certain animals, places or events. Narrative should precede description, in fact young writers should not be asked to describe till they have developed a fairly wide vocabulary.

At the high school stage the programme may be followed up by having class magazines or subject magazines. Geography magazines giving facts and figures about places, development projects, mountains, rivers, mines, industries and the like will make very interesting reading. Students may write about subjects discussed and debated in school unions, and in newspapers, they may write about important people in the public eye, descriptions of places visited or of matches watched. Teachers will do well to suggest topics and even the way those topics should be treated. 'People will read what you write only if you make it worth their

reading' often starts the young writers on interesting ventures.

A very good preparation for the printed magazine is the blackboard magazine. In our school we have five panels, one on either side of the stairs and three on the landing. One of them is for general news and one for sports news, both are written every morning. Of the remaining three panels, one is reserved for facts and figures regarding our national resources and development projects, often comparative figures make very interesting reading. One is devoted to inspiring thoughts from literature, religion or ethics and the third is devoted to science. Items are selected by both teachers and students. There is a question box and some intelligent and interesting questions selected by students are also answered on the panels of the blackboard magazine. The three panels are written twice a week and the students doing this work are frequently changed so that a larger number of them could be connected with it.

The printed magazine is published twice a year and contains selected items from these as well.

Students take to this work with great interest and the success depends on the type of guidance that is made available to them. They should have a lot of reading material and some of this material should be read in the class. The teacher may comment that a similar thing could be done in another way.

With new objectives in language teaching the composition work in classes can be easily linked with the magazine work and some worthy attempts may be published. Reporting of school functions should also be done by students and much of the work connected

with printing like lay-out and proof-correcting may be handled by students under the guidance of teachers. An editorial board consisting of students and teachers may distribute the work among themselves.

The School Union

The school union should offer students opportunities for training in responsibility and co-operation. Every student should be a member and its organisation should be democratic. Each class should elect a representative and the staff too may elect one or two representatives on its executive committee. There will be one secretary, one or two assistant-secretaries, one president and two vice-presidents. If there are any funds to be administered, it is better to have one of the teacher-members to be a treasurer. The principal is to act as the patron. This committee should conduct meetings and discussions by which students of the school acquire understanding and practice in democratic procedures. It should be possible for any student in the school to bring his own ideas before the executive committee or even the union. The secretary should hold meetings and keep record of proceedings and the president should take the chair at all meetings. The elections should be held every year and a programme for the whole year should be drawn up in advance.

The principal and the teachers should leave a number of decisions to the students and if they do not agree with some of them, instead of overruling them they should be sent back to the school union for reconsideration, with notes as to what points need such reconsideration. The union should be responsible for discipline

in the school and cases of indiscipline should be adjudged by them. The mid-day meal, the cafeteria, the store, the reading-room after school hours, starting new activities, inter-school contests and the like can be successfully handled by them. In one school a few students purchased things from hawkers after the school, this was forbidden by the school and the fact was brought to the notice of the union and the thing was stopped.

The school union will prove a great asset to school administration and provide for the maximum development in responsible citizenship. But the school authorities must be willing to put up with students' freedom and to share responsibility with them. At least they must give up their authoritarian ways. In the initial stages some freedom may be abused but whoever learned the right use of freedom without to some extent misusing it? That price shall have to be paid before individual and group self-control, democratic understanding and behaviour are acquired. Much will depend on the teachers responsible for guiding the school union. Their patience, understanding, intelligent analysis and discussion of problems and issues will smooth many a tumble. With intimate knowledge of adolescent psychology, their hunger for independence and recognition, and of their great desire for friendship and self-assurance, the teacher may acquire a hold over students which will prove very beneficial in building a healthy tone in the school and teaching students group loyalty, mutual regard and *esprit de corps*.

VIII

In the end let us consider some practical suggestions

for a programme of co-curricular activities. In the first place the number of activities to be introduced in a school should be carefully determined by the number of pupils in a school and the resources in terms of teachers' interests and talents and of equipment and funds available. Secondly the purpose and aim of an activity should be carefully considered before starting it. Thirdly introduction of these activities should be very gradual and no attempt should be made to start a number of them at the same time. All overlapping should be avoided and no activity should receive greater emphasis at the cost of another.

There should be a proper system of evaluation, so students' participation in co-curricular activities and mention of it should be made in the cumulative record cards, published magazine or at school functions so that parents and the community may also see. These evaluations and records should be used for guidance later on.

Every student should participate in at least one of the activities but the number of activities he can take part in should be limited. To ensure participation of all students the expenses should be kept low and students should be encouraged to build up their funds from contributions, sale proceeds of articles made by them and the like for incidental expenditure on co-curricular activities.

Every teacher should be attached to one activity or the other and should guide its programmes with keen interest and to the best of his ability. In selecting teachers for appointment, preference should be given to those who have a special talent for co-curricular activities. Teachers should make careful preparation

for co-curricular work as they do for the curricular, that is, for teaching subjects. In teachers' training institutions, provision should be made for training prospective teachers in one co-curricular activity or the other and for teachers in service short-term courses should be arranged by universities and training colleges.

As far as possible time for co-curricular activities should be provided in the daily routine.

CHAPTER XII

AUDIO-VISUAL AIDS

The traditional methods of teaching and learning turn on words, spoken, written and read and their failure and weakness is due mostly to the fact they lean too heavily on the verbal approach. Books are their only stock-in-trade. Too often the verbal symbols used are not in any way associated with actual experience and mean very little to the young learner. They are mere barren abstractions which he repeats without understanding. Effective learning results from a variety of experiences, direct and immediate. The present experience is meaningful to the extent to which it is related to, and serves to interpret, past experience. Meanings gained through the senses, through eyes and ears, arise in imagery and give reality to words, and unless words call up images of things and events they do not mean much.

Words denote concepts and for accurate and rich concepts sensory experience of many kinds is necessary. If we can touch, feel, hear and see a thing our knowledge of it is fuller than if we can only read about it. This multiple approach in sensory experience is very vital in making learning effective. And then our entire approach to education by which we mean the all-round development of personality calls for a variety and multiplicity of experiences, cognitive, emotional and practical. In fact every type of experience and activity must be tapped to make learning fuller and richer. Finally the range of individual differences among pupils is very large and if educational material is to suit

the varied needs, abilities and interests of all pupils, it should not be merely verbal or bookish but also something which directly appeals to their senses. The introduction of audio-visual aids is to meet the challenge of dynamism in education, the changing aims and purposes of education and the changing needs and interests of young people who are being educated.

The role of audio-visual aids in liberalising the education of the school children has been stressed by the Secondary Education Commission. Modern psychology of learning and rapid progress in the production of audio-visual aids have made their effective and extensive use possible, and their educational value is now being increasingly accepted. Let us detail some of the advantages that accrue from their use.

In the first place they are an easy means of obtaining information, understanding and illustration that may be difficult for many pupils if presented through words and books alone. In fact these aids are used as supplementary devices by which the teacher through utilization of important sensory channels of his pupils helps to clarify and correlate concepts and appreciations. Many students understood *The Bishops' Candlesticks* much better after it was put on the stage. After seeing *Richard III* acted by Olivier the character assumed a new significance and the play became much more enjoyable. The new jump-up books for children certainly make for better understanding. English films in general have added to our knowledge of Western life and have promoted and improved cultural understanding between East and West. An illustrated book is preferred to one without illustration for this very reason and many of the geographical topics become

meaningful when students pay a visit to the places concerned.

Secondly because the impressions received from audio-visual aids are striking, intense and accurate they are more easily acquired and retained longer than those formed by mere words heard or read. Seeing and handling actual specimens make the words students read in books come alive. A wide variety of audio-visual material will quicken the development of insight because facts, ideas and concepts are presented in concrete form to supplement the abstract verbal form in which they are presented in books.

Thirdly audio-visual aids widen the mental horizon of pupils, arouse their curiosity and help them to look for a larger, wider world. To some extent films of other lands make up for want of travel and stimulate young to know more about people and places they see in pictures. Many young people spend hours poring over volumes of *People in Other Lands*. It helps them to see farther than their immediate environment.

Lastly audio-visual aids break the monotony of book-learning, create interest in work and motivate instruction.

II

Different kinds of audio-visual aids that may be used in our schools are:

1. Projectors and magic lanterns projecting films, film strips and slides
2. Unprojected pictures like photographs, paintings, illustrated books, jump-up books, scrap-books, mounted clippings

3. Gramophones, linguaphone, tape-recorders
4. Radio
5. Amplifying equipment
6. Graphic material like maps, charts, cartoons, diagrams, posters
7. Working models, biological specimens, collections, museums
8. Trips and excursions to places of interest.
9. Dramatics

In a way dramatics, trips and excursions are not so much aids as means of making those aids available.

Let us consider some of the common aids in detail.

Scrap-Books

A very inexpensive and easily prepared visual aid is the scrap-book made out of cuttings from illustrated magazines and newspapers. Used exercise books may be used for pasting clippings from old illustrated journals. A scrap-book gives great scope for creative work on a subject which interests the young pupil. But it should not be a book filled with pictures cut and pasted at random. Scrap-books should have a plan and contain a fairly large proportion of written work describing and enlarging on the description given in the pictorial matter.

To begin with children in junior classes may illustrate nursery rhymes and gradually they should be led to handle subjects related to the geography and history of the city or the state. Later trips and excursions to places of historical, geographical, commercial and industrial interest may be illustrated with photos, picture post-cards, charts and even drawings. When an important

trip is undertaken the whole class should be asked to co-operate in the compiling of the scrap-book, some contributing pictures, others charts and drawings, and still others, short descriptions of places visited and of points of interest. Such class scrap-books can form the basis of very fruitful discussion on return to the class-room.

Covers of scrap-books can be decorated and the books can be placed in a museum for study by other classes.

Museum

The school museum is a very useful and effective aid to teaching and helps to add to pupils' interest in a subject. Students going about collecting specimens or making charts and models experience the positive delight and pride of a discoverer. The museum also tends to develop interest in different hobbies and thus provides suitable training for leisure hours. It also enables the teacher to get illustrative material for the purpose of illustrating his lessons. In this way it is a useful adjunct of every school.

The Secondary Education Commission observes:

At present there are no museums in India of the type that exist in some of the European and American cities. We believe it is necessary from the educational point of view to establish such museums in important centres at least, wherein both ancient and modern collections will be exhibited and in some cases even demonstrations given of the actual process of development of various scientific discoveries. Nothing can impress the students in the

formative age so much as the actual visualising of these experiments in graphic manner. Museums play a great part in the education of school children as they bring home to them much more vividly than any prosaic lectures the discoveries of the past and various developments that have taken place in many fields of Science and Technology. . . . They can supply a background of information in regard to history, art and other fields of learning.'

Radio

The radio has come to occupy an important place in our life and is rapidly being used as an educational aid in our schools. But arrangements made for school broadcasts leave much to be desired. The school programmes are all too short, there is no planned collaboration between the All-India Radio and schools to make the best possible use of such programmes, nor are educationists quite clear about the method and extent of such use. Often the time of school broadcasts coincides with the mid-day recess when students prefer to go for lunch rather than listen to radio programmes. The All-India Radio have no scheme to reach schools or invite their co-operation in planning suitable programmes. It is not the purpose of this chapter to make suggestions in this direction but to suggest ways and means by which the best possible use can be made of radio programmes as they are. But one point must be made. Very seldom detailed programmes of school broadcasts are available beforehand to enable teachers to suggest their use. Under the circumstances the best that can be done is to scan the programmes

¹ *Secondary Education Commission Report*, p. 116.

and bring some important items to the notice of students. They should be advised to listen to:

1. Music which can have only recreational value for them as music is not very seriously studied or taught in our common schools. Of course they will acquire appreciations and information about music and musicians which have a liberalising influence on their education.
2. Talks by eminent people. These are often above the understanding of school pupils and are addressed to special groups and interests.
3. Travel talks. These are few and far between and often not suitable for young people.
4. Information talks which may arouse their curiosity and induce them to know more about the subject.
5. News broadcasts.

Teachers may discuss some of the important items in the class after students have listened at home. With no well-developed programmes beamed specially at schools and with no special time and room in the school for listening the educational value of the radio cannot be realised at present. The *Secondary Education Commission Report* contains a pointed reference to school broadcasts. 'It is hardly necessary for us to emphasise that such broadcasts should be by well-qualified persons and should create an interest in the subject. Nothing is calculated to produce in the child an aversion for such broadcasts as the monotonous and none too graphic description that sometimes is given by persons not quite familiar with the psychology of the young mind.'¹

¹ *Secondary Education Commission Report*, p. 117.

Film Projection

In modern life there is no more powerful influence than films in spreading information, arousing emotions, encouraging attitudes, indicating standards of conduct and the like, and their educational value is being increasingly recognised. One has only to sit for a few minutes informally among teen-agers to find that films and film personalities monopolise their talk. In fact the cultural influence of the film is more far-reaching and powerful than even the press or the radio. Therefore, the inclusion of films in the school work and experience will only mean a useful alignment between the school and the film, two powerful forces in the development of individual and social behaviour. But the use of films in schools also serves a sound educational purpose and they are an effective aid in teaching and learning. Not only do they help to sustain and strengthen pupils' interest in a subject and bring a change in the monotony of school routine but also showing actions of persons and things it helps better understanding of topics. All those who have used films in their schools feel that the place and value of films as an educational medium is assured and cannot be ignored. Their incidental approach is educationally more effective than direct teaching in the class.

Some films only impart knowledge and information. How cloth is manufactured? How tea reaches the table? How the newspaper is printed? Such films will give details and their relationship which no book or teacher can provide. Some films only demonstrate. How to play tennis, dancing lessons, civic negligence, the need of sanitary precautions and the like have taught much

more and with greater effect than any formal lesson. Some films only arouse interest or inspire young people. Travel films, films of historical places or beautiful natural scenes have sharpened the interest of many young people to go and see such places.

But the use of films for educational purposes requires careful planning. Teachers who are going to utilize the film must have a preview of it and must note down some of its contents. They must also see if the film is suitable for students to whom it is being shown, if there are any details which need elucidation before exhibiting the film and how it can be related to the class-work. Some points may need greater emphasis than given in the film. Often certain inferences can be drawn from the theme of films, students may have to be prepared for the theme and the show may be followed up by a discussion. Unless the film is shown purely for entertainment, teachers must have a plan for an effective treatment of the theme before and after the film show. It is a good plan to show a film more than once so that details missed in the first show are caught in the second or the third. The film show should be announced a few days earlier, the students' curiosity should be aroused and if any reading is to be done it should be suggested so that the maximum benefit is derived from the film.

But how many secondary schools in India are fortunate enough to have a film projector or an auditorium where to show it? And those who have, what sort of films are available to them? Film libraries will take long to grow in our country and the schools who can afford a projector must rest content with what films are available from official agencies, municipal health

departments, manufacturers of consumer goods or show cartoons. The British Council and United States Information Service are a great standby and their ready service in this direction is very commendable but one cannot help wishing that such quality films with Indian background and interest were as readily available.

Schools in outlying districts need the benefit of films much more than schools situated in large towns and it is there that film projection equipment is not even known, and it would be worthwhile to have at least one projector in every district office with equipment and facilities for film projection, as also a film library so that it may be made available to schools.

Book Illustration

Drawing and painting are effective media of expression and young people should be encouraged to draw and paint what they read and learn. Many textbooks are fairly well illustrated and teachers will do well to relate them to the reading material but where such pictorial aids are not available it would be better to improvise them. In one school the students of a class illustrated the whole story of *Gulliver's Travels*. Such a project surely makes for better understanding and appreciation of the text. The reason for illustrating a play is stronger. 'What scene in the play appeals to you most?' Let students have a mental picture and draw it on paper. Every attempt in the class will not be good but certainly a few will be quite up to the mark. Schools in which art and craft is compulsory up to the middle stage can handle such projects easily enough and the art teacher can lend a hand.

Some illustrations given in textbooks can be filled in and enlarged for display on the walls. Pictures of scientific experiments, geographical and historical interest, of natural scenes and eminent leaders not only add colour to the school building but are themselves referred to by students when and if they have had a lesson about them. Such pictures should frequently change places because lying at one place they are likely to be taken for granted and pass unnoticed.

III

There are a number of agencies providing ready-made audio-visual aids but it would give young people valuable opportunities for creative meaningful work if they are encouraged and helped to prepare some of the aids. Maps, charts, drawings, models and slides can be prepared by them and in so doing students gain understanding and appreciation which mere reading is unable to give them. It is always difficult for young people to understand the meaning of plains, forests, plateaus and mountains from a flat map but if they are set on preparing a relief map from papier-mâché it will not only give them an opportunity for very interesting activity but also for deep insight into the subject. To preserve the scale they will have to measure carefully and frequently, to calculate and seek information from books. All this helps learning.

Some of the charts done in schools are as good as printed if not better and when framed look very impressive.

The operation of film and slide projection equipment should be done by students after they have been taught their use.

Let us consider the use of audio-visual aids in the teaching of social studies and general science.

Social Studies

The use of audio-visual aids in the teaching of social studies is not yet fully realized. Trips and excursions help mutual understanding among different sections of people. Open-air sessions may be organised from time to time so that students may come in contact with natural environment. Exhibitions of films on health, sanitation, social habits and institutions, community development and development projects should be followed by short talks emphasising their significance. Pupils should also prepare charts and models of our development projects. Important phases of historical development, social habits and customs, class distinctions and evils thereof, and the like may be dramatized. One school dramatized a feature play on non-violence under the caption: 'We will not fight', tracing the practice of *Ahimsa* from the ancient days of Buddha and Asoka to the modern view of Gandhi and Vinoba Bhave and to the international policy of co-existence put forward by Nehru. This feature play was written by one of the teachers. In fact social life in different lands and different periods of history, the several aspects of the dynamics of social living, our heritage of ideas, trends in our economy and culture and the different phases of our planned progress, all can be dramatized and their significance brought out more clearly.

Comparative facts and figures about life span, food consumption, cattle wealth, produce per acre, expenditure of entertainment, travel or health, the ratio of

doctors, engineers, automobiles, radios or aeroplanes to population in other countries make for very important understandings and attitudes. Some time back one of the classes was very much intrigued to read the news item that Americans are growing taller. A very fruitful discussion regarding their food habits, their attitude to work and recreation, their social life, their great country followed. Such facts can be studied through charts prepared by students.

Similarly news broadcasts can be made the subject of class discussion about modern trends in national and international political life.

General Science

In general science pupils have to deal with a wide range of phenomena and unless they have a wide variety of material at hand they cannot learn much from books. Science is based on observation and young people must have much to observe. The most important thing is to make available to them actual things they are going to study. Let there be a *science corner* where related things are presented at one time for the pupils to see and handle. At one time there may be collections of earth, soil, rocks, bottles of crude oil. At another time there may be electric bell, push buttons, insulating tape, batteries or barometer, maximum and minimum temperature thermometer. At still other times there may be collections of insects, butterflies, spiders, egg cases, a microscope etc. When material is at hand without too much looking the young scientists' interest is very much enhanced. Science exhibitions can be easily organised in towns where

science models and equipment can be easily borrowed and operated by students. Visits to natural history museum, zoo, botanical garden, industrial plants, preparations of models and charts in science clubs go a long way to stimulate interest in things of science. Aero-modelling in N.C.C. (Air) can be related to science projects to add to both interest and knowledge.

IV

But it should not be forgotten that these are just aids and must be used with great caution. They are to supplement the work of the teacher and the textbook not to replace them. Their use should come in the course of the lesson or class-work. Some object that their use will obstruct thinking or prevent clear expression in language since pupils will be taken up all the time with things and pictures. This is not true. On the contrary these aids will make thinking more accurate and concrete and if teachers follow up the use of aids by asking pupils to note down what they observed they will have enough opportunity to express themselves in language.

The use of such aids should preferably be preceded by a series of such steps on the part of the teacher as preparation, presentation, application, discussion and criticism.

CHAPTER XIII

EDUCATIONAL AND VOCATIONAL GUIDANCE

WHEN the high school curriculum was of one piece, of single unilateral type young people did not need any or much guidance. They pursued the only course prescribed and if they could not make any headway they were eliminated. And the high schools had only one function — to prepare students for colleges and universities. With the introduction of electives, diversified courses to be chosen according to one's needs, interests, aptitudes and abilities, the need and value of systematic guidance have come to be realized. 'The provision of diversified courses of instruction imposes on teachers and school administrators the additional responsibility of giving proper guidance to pupils in their choice of courses and careers. The secret of good education consists in enabling the student to realise what are his talents and aptitudes and in what manner and to what extent he can best develop them so as to achieve proper social adjustment and seek right types of employment.'

In a way education has always included guidance. If education concerns itself with the physical, intellectual, emotional, and social growth of the child, it must help him to adjust himself to a changing world, and much more than proficiency in study is necessary for adequate adjustment. Each individual pupil has certain interests and abilities which must be helped to develop and grow to their best for individual and social advantage. Guidance emphasises such a service.

It is not so much a device or technique as a new emphasis on self-direction, self-development and self-realization on the part of students with the help of the school. Obviously such a programme will be centred on individual pupils.

I

Guidance is of several kinds. Educational guidance is interpreted to mean the guidance of the pupil with regard to the choice of school curricular subjects and effective learning of them. The latter is even more important. Pupils should be guided to understand and appreciate their abilities, to adjust their academic load accordingly, to develop effective study habits, to arrange their study time fruitfully, to accept full responsibility for learning and to make the most of opportunities for better study and learning offered by the teacher, the school and home environment.

Vocational guidance helps the pupil in choosing an occupation, in preparing for it, in securing a job and in making progress in it. Vocational guidance is closely related to educational guidance at the high school stage. The choice of elective or optional subjects at the beginning of the high school course is to a very large extent determined by considerations of what occupation or way of making a living the student is going to adopt after finishing his education. He may have to study further in professional colleges or training institutions but the die is more or less cast in his choice of subjects on entering the high school. His range of interests and abilities is as important as the trends in employment opportunities.

Health guidance seeks to assist the individual student in building and maintaining the best type of physical and mental health he is capable of. Advice concerning exercise, diet, work and rest is given to each student so that he or she keeps alert, active, free from disease and in good strength.

Leisure-time guidance aims at advising them in making the best possible use of their leisure. Monotony and boredom are some of the powerful enemies of health and in view of the growing reduction in working hours this type of guidance is very important. A wise use of leisure wards off weariness and may sometimes lead to fruitful hobbies.

Civic guidance seeks to develop the individual into an efficient citizen with a sensitive regard for the laws of the government and for the welfare of the community and the nation.

Moral guidance seeks to cultivate among young people a strong moral consciousness, a knowledge of what is right and the will to pursue it. In a world in which moral distinctions are for ever eluding us and in which people are inclined to treat them lightly character or ethical guidance is of crucial importance.

Secondary education deals with the education of the adolescent who is for ever creating or meeting crises. Adolescence is often spoken of as a critical stage and it is in times of crisis that guidance is needed most. The several types of guidance enumerated above indicate the areas of life in which the adolescent boys and girls are sure to meet a challenge and need advice from mature adults as to how challenges and crises are to be met.

It must not be presumed that these types are to be

separated from each other or are to be given by different people. Life is one, the individual is being educated as a whole person not piecemeal in several spheres, and like life and education guidance is also a whole unified effort to help the individual student in different phases and aspects of life and work. In a broad way guidance is implied in every activity of the school and it is as should be, for the aims of education and guidance are identical as enabling young people to understand their abilities and interests, to develop them to the maximum, to relate them to aims and purposes of life and to reach self-direction and self-realization as effective and efficient members of society.

II

The implications of guidance are in full accord with the ideals of modern education. Our ideal today is the balanced development of all aspects of personality, and guidance seeks to individualise all education, to bring to bear on the individual those influences which stimulate and help him, through his own efforts, to develop his abilities to the best. He is encouraged to make the most of his abilities and opportunities. Ultimately the school community is made up of individual students, and the merit and effectiveness of the community, class or group will rest on the merit and effectiveness of individual students. If the individual is not pulling his full weight and making the most of his abilities and opportunities, the progress of the group will suffer. We know too well how a slow worker or a shirker pulls back the whole class. He has to be given special attention so that the progress of the entire class

is not hampered. Guidance is exactly what such students need. The teacher tries to know each student — his abilities, interests, environment at home and the like, and to help them to make suitable adjustments to problems and difficulties of learning.

Let us outline briefly some of the basic ideas or presuppositions of guidance.

1. Each student is unique. No two individuals are alike. They differ in physical, mental and emotional characteristics, and these differences must be considered in all educational programmes.
2. Each student is an independent personality and has a right to develop as an individual to his fullest potentiality.
3. The student is more important than the school and therefore the school environment should be changed or re-arranged to suit the requirements of individual students.
4. The individual grows and learns best through and by his own effort and direction. Guidance does not improve students, it only helps them to improve themselves.
5. Rapid social changes have multiplied conflicts and tensions and call for more complex adjustments on the part of every individual. He has to grasp new ideas and adjust himself to the pressures they impose. He has to learn new methods of work, develop new attitudes and make numerous contacts with people.
6. Every individual must be rightly placed in employment. He should choose, secure and succeed in a job he likes and doing which he

feels happy. Only then does he gain in respect and confidence, and can contribute to the stability and progress of society.

7. Work situations in our times require specialisation and therefore individual aptitudes and job requirements must be carefully co-ordinated through an effective programme of guidance.

III

The advantages that accrue from a programme of guidance are many and varied. In the first place effective guidance conserves and develops human resources. The number of 'problem' children who could be helped to live at peace with themselves and their fellows, of juvenile delinquents who could be helped to become useful citizens and of frustrated people who could be helped to find the square hole and achieve vocational success, self-confidence and happiness is easily very large and is a loss to the nation. Guidance could reduce that loss. A pattern of guidance is essential if society is to move in a more socially adequate direction.

Secondly large expenditure on education is being wasted today because students are not helped to know and assess their own interests and abilities, to 'make wise choice among a wide variety of courses and vocational opportunities and to achieve wholesome and personal and social adjustments. A comparatively small expenditure on guidance would be a financial saving as it would help us to get the best out of our present budgets.

Thirdly when a pupil makes a wrong choice of

courses, he loses interest, becomes irregular in work and attendance, and may leave the school. Such pupils cause all-round frustration, to themselves, to teachers and to parents. Guidance could help to reduce such frustrations.

Fourthly it is obvious that guidance saves time and energy of teachers and pupils by reducing problems in and outside the class-room.

IV

All guidance service, it must have already been realized by readers, must begin with an understanding of the individual, what pattern of interests and abilities he has and how he is generally motivated. Let us enumerate some of the ways in which knowledge of the individual student is acquired.

- (1) By observing and studying the pupil in the class-room, playground, library or while he is participating in extra-curricular activities useful information can be collected about him. But this observation should not be casual or confined to one teacher. It should be done methodically and with skill by a number of teachers who have had adequate training and sufficient experience in assessing behaviour and interpreting motivation.
- (2) Medical examination will reveal not only measurements of height, weight or chest expansion but also any pathological disturbance which may be hindering physical, mental or social growth. Many cases of problem behaviour in the class, negligence in study and habitual lack of attention have been traced to defective eyesight or hearing.

How can a boy attend to the lesson when he does not see what is written on the blackboard or hear what the teacher says.

- (3) School records if they are cumulative and comprehensive will reveal not only scholastic progress of the pupil but also his interest in extra-curricular activities, his relations with his classmates and teachers, judgments of previous teachers, family history and the like. In the new high schools cumulative records are being introduced and one such form is given in the appendix.
- (4) Case studies often provide very useful clues to the problems of students. Including as they do comprehensive data systematically gathered from school records, family history, talks with parents, teachers' observation and the like they shed light on some of the knotty problems of students in and outside the class-room. Mohan who topped the list in class v was an average student in class vi and almost failed in class vii. His case was studied by the school psychologist and discussed with his father. It was revealed that he was the only son of his father, had two younger sisters and received all the affection and attention of the family. Two years back a brother was born to him and the entire affection and attention of the family was transferred to the newborn. Nobody paid any heed to him and he lost interest in his work.
- (5) Personal talk with individual pupils also is very helpful but such talk should be held by experienced teachers who can establish a rapport with

- pupils and gain their confidence and affection.
- (6) Group and individual tests of intelligence will yield I.Q. which if compared with A.Q. (attainment quotient) will reveal if the pupil is pulling his full weight. A school should administer certain tests to all students at least once a year and supplement it with special tests to be taken by only certain students.

A good testing programme should include scholastic aptitude tests to measure the aptitude required to succeed in school work, tests of achievement in several school subjects and tests of interests.

Usually group tests should be given first to be followed by individual tests for more specialised appraisal. But arrangements of such tests are not available in high schools nor is the test material to be had.

In my institution sociometric tests asking students to nominate classmates as friends were given to a number of classes and the score closely proximated students' ratings by teachers.

Testing programmes in India will take long to develop for lack of testing material and properly trained personnel. My school is fortunate in having a whole-time psychologist but how many high schools can afford it.

- (7) Students may be asked to write authentic autobiographies in the language work and these yield a ready data on the personal qualities of the individual student. While autobiographies are very useful for guidance they have to be very carefully interpreted.

V

The new scheme of secondary education aims at providing equality of opportunity for all pupils. It means every pupil must be given the right type of education, that is, education suited to his abilities and interests. Now the problem of discovering differences in abilities and interests between those who can profit from a commerce, science or technical course is obviously not simple. Mistakes are sure to be made in choosing courses and as a number of courses are being provided under the same roof transfers during the first six months may be allowed to get over the difficulty. But even then this trial and error method is not reliable. The remedy lies in the development of adequate systems of guidance and their effective applications. But this cannot be done without active co-operation from parents. They must first be convinced about the soundness of any advice that school counsellors may give them regarding the education of their children. Very often parents resent outside interference with their ambitions and plans for their children. The most important requisite for the success and effectiveness of guidance programmes in new high schools, therefore, is the willing and wholehearted co-operation of parents and guardians.

Too often a plea is made for setting up parent-teacher associations but what should they do is not indicated. It is not possible to discuss problems of students with parents in such meetings except in a very general and academic way, and this does not go very far. Guidance programmes should be preceded by two phases:

- (1) A rich programme of social cultural activities

providing useful service to the community and variety entertainments will attract parents to the school and its programmes.

- (2) A series of talks of informative nature on our developing national economy and the numerous and varied opportunities it offers for careers for their children. These talks should be supplemented by a provision of detailed literature on vocational openings in the library to which parents should be invited.

Parents strongly desire the happiness and vocational success of their children and this desire should be capitalized by schools to pave the way for an effective programme of guidance. Parents should not be asked to accept uncritically the advice of the counsellor but should be invited to share the work of guidance, to understand guidance tools, how they are used, how the data they provide is interpreted and what conclusions are drawn therefrom. Parents are very likely to be very sceptical about the value of guidance and shall have to be educated with regard to the techniques and value of guidance. It would be better to have parents nominated on guidance committees.

Too many parents have pre-conceived notions about their children, expectations about their achievements and dreams and ambitions of their great success. These they hold so dear that if the school offers adverse advice they react very strongly against it. Therefore parents should be actively associated with programmes of guidance in schools and should be persuaded to meet teachers and the headmaster frequently to discuss the progress of their children in study and what they are

intending to do after school. Such meetings will wear down the parental prejudice that guidance work in any way challenges the sacred and exclusive right of parents to decide the future of their children.

Frequent parent-teacher meetings, distribution of brochures describing career openings for young people, career conferences to which parents and employers are invited for talks, discussions, film-shows and the like for general orientation of parents with regard to possible careers for their children and the like will help parents to accept guidance programmes.

Many parents have not grasped the idea behind the multi-purpose higher secondary schools. They do not know what are the aims and objectives and how the situation of choice of courses in the 'delta' class will have to be faced by their children. The new higher secondary and multi-purpose schools are doing their bit by issuing circulars regarding the new scheme but it would be better if some official agency like the All-India Council for Secondary Education, the Education Department or the Board of Secondary Education issues pamphlets or arranges radio talks specifically for parents and employers regarding the new deal in secondary education.

VI

Guidance programmes in multi-purpose schools shall have to be continuous and dynamic, changing with the growing needs of pupils in different classes. In classes vii and viii not only pupils should continually be told about the selection of courses when they reach class ix and about the possible vocations they may

choose after passing the higher secondary course but they should also be carefully considered with regard to their suitability to pursue the course. It is a pity that every pupil is allowed to join the higher secondary course irrespective of his or her suitability for it.

This means that pupils in class viii should be helped to plan their future because choice of courses in class ix is going to limit their vocational interests. At this stage they should be given orientation talks with regard to courses and the possible opportunities for employment in later life and guidance work should be done by all teachers, both in helping them to choose one of the courses and in encouraging and guiding them to make progress in study and learning in those subjects. This means that apart from general guidance work from class vii onward intensive guidance work shall have to be undertaken with regard to choice of courses in class viii and with regard to choice of vocations, higher technical courses, employment opportunities, success and progress in employment and the like in class xi after which they pass out.

Tests of aptitude and ability have not yet been devised and will take some time, but attainment tests in several curricular subjects are in the making and should be used. A close liaison should be maintained with the State Bureau of Educational and Psychological Research so that what test material is available is made use of, and such difficulties as arise in the course of guidance work are removed with expert advice and help.

Orientation programmes can be made very interesting. Talks from people successful in different walks of life about how they began and how they work, talks

by heads of different vocations like a bank manager, a factory owner, a postmaster, a workshop manager, a police officer, a doctor or an auditor about the nature of his work and the pattern of his life, film-shows of different fields of work and industrial plants, visits to big stores, railway stations, factories, business offices, aerodromes and educational and professional institutions and the like will help young people to acquire information in a very interesting and realistic manner about different types of vocations. Such orientation items should be preceded by necessary introductions in the class-room by teachers and should be followed up by discussions so that young people may have opportunities to find out more and concentrate their thoughts on the subject.

In every school there should be a rich and varied programme of co-curricular activities which should form a part of the regular school programme and should bear close relation to the curricular needs of the multi-purpose school. This integration is very important as it will not only help a practical approach to curricular work but also reveal the range and intensity of pupils' interests in various curricular areas. A careful record should be maintained of pupils' participation in such activities. Elsewhere in this book co-curricular activities have been discussed in greater detail.

Provision should be made for a permanent guidance corner in every multi-purpose school for orientation through visual aids like posters, charts or employment notices.

Headmasters of middle schools should have opportunities to acquaint themselves with methods and

materials used in guidance programmes and services of counsellors should be available to them from multi-purpose schools which their pupils are likely to join.

Every pupil both in delta classes and later should have at least one interview with the counsellor every year. These interviews may be held incidentally without any schedule, but they should never be casual. The counsellor must be very informal and friendly in these interviews so that the pupil is free to talk about his problems and is encouraged to share confidence with the counsellor. The counsellor should develop *rapport* so that the pupil feels quite at home with him. Before the interview the counsellor should have collected all the available information about the pupil from school records or his class teachers. It is no use asking at the interview the vocation of the pupil's father or his achievements in the last examination or the type of co-curricular activities he participates in. This information should be already with the counsellor and it would promote *rapport* if the pupil is made to realise that he is already known to the counsellor. Counselling at the interview should be done very indirectly. The pupil should be talked to and not talked at. One very effective way of doing so is to begin with an interpretation of the pupil's achievements in tests and co-curricular activities in terms of his special interest and abilities. He may start with complimentary observations on some of his work in school and then proceed to indicate ways in which such interests and abilities can be capitalized for success and happiness in life through various vocations. Examples of local people who have done so may be cited, and almost imperceptibly, without pressure or persuasion the seeds of motive

power may be sown and the pupil may be led to develop strong interest in the direction of study and work indicated. He should be encouraged to dream and plan his future, to seek information, to search within and to seek guidance about his personal, educational and vocational problems. If necessary the pupil may be asked to think about the issues raised at the interview and to seek another opportunity for further discussion.

VII

Who should guide? What are the qualifications of a counsellor? Usually two types of counsellors are envisaged, part-time teacher-counsellors or career masters who receive three months' training in some psychological bureau and whole-time counsellors who undergo a full year's course. For the former a trained graduate with two years' teaching experience and for the latter an M.A. in psychology or education is considered competent. With training courses as they are, and some of them have not been revised during the last twenty-five years, a mere training degree or diploma should not be considered enough. A good background in psychology is absolutely necessary.

In a way guidance work is a co-operative affair in which all teachers lend a hand but the career master works as the spearhead. It would be better if every school has a guidance committee with the headmaster as the chairman and the career master as the secretary, two teachers and two guardians as members. This committee should be responsible for the organisation work but for actual work of guidance it would be better

to have a small committee for each class consisting of teachers of that class and the career master. If every teacher is to share guidance work it is essential that knowledge of guidance methods and materials should be included in the training course for secondary teachers.

The counsellor should be a person of deep insight, sensitivity of intellect and conscience, and must have a wide range and depth of personal qualifications to understand and deal with young people of a wide variety of interests and abilities. His main task is not to give unchallengeable advice or indicate a definite course of action as the only suitable solution of the pupil's problems but to help him to achieve self-direction and self-adjustment. The initiative and effort in choosing and achieving goals are to be entirely of the pupil and the counsellor is to assist him to stand on his own two feet.

During the interview the counsellor should be very patient, encouraging the pupil to express himself freely, to think out his thoughts, to suggest possible solutions of his problems. The counsellor may supply information when necessary but he should scrupulously avoid taking the lead in the discussion. No doubt he is better informed and can think much more clearly but nevertheless he should not lose sight of the main objective of assisting the pupil to manage his own affairs, direct his own effort and make his own choice. The essential purpose of guidance and counselling would be lost if he were to reveal his own bias or in any way to project it during the interview.

The counsellor should be a person who understands himself, his objective and realises his definite attitudes

and prejudices. Capacity for a realistic self-appraisal of one's own personality is a very important qualification of a counsellor.

He should also be an optimist who believes that there is hope for everybody and that things can be done better.

Counselling is a very important phase of the guidance programme but by itself it does not constitute cumulative guidance, for the counsellor must use records of pupils, obtain information from parents and teachers and study test scores and such other data about the qualities and abilities of the individual pupil.

VIII

It must be clearly understood that the success of the multi-purpose school rests entirely on effective guidance. But diverting students into the several courses presents considerable difficulties. Some aspects of the problem have been emphasised in the chapter 'The Seven Streams'. Home science is meant primarily for girls and those girls who do not score high in academic subjects take to this course for an easy pass. And it is presumed that all girls have an aptitude for the course and the wishes of parents and students decide. Agriculture can be provided only in rural areas and should be allowed to students who take to the land and are likely to stay in their village home. Health, physical vigour and qualities necessary for farming are fairly obvious and may be the basis of choice. In Fine Arts, opportunities for drawing, painting and music are available in delta classes and interest and ability in the direction can be spotted. And

students' appraisal of their interests and parents' wishes will be a fair criterion for judgment. But diverting students into the other four courses of Humanities, Science, Commerce and Technical is not at all easy. All these courses make a high demand on students' general intelligence and it is extremely difficult to devise any yardstick with which to measure students' aptitude for either of these courses. Generally students who have a high score in mathematics in the delta class are encouraged to take up science or the technical course and occasionally mathematical aptitude tests are used. But is that enough? Is it possible to obtain any reliable evidence by interpreting examination score in lower classes? Can we say that students with a certain I.Q. should take up this or that course? No aptitude tests are available for channelising students into the commerce course. Therefore guidance work is extremely difficult and when boys join class ix in most cases the wishes of parents are the deciding factor and their wishes are based mostly on passing fancy or irrational ambition. Those parents who are well-to-do feel confident that with suitable opportunities and resources their ward can be fitted into the vocation they have selected. It is not easy to convince these parents.

Guidance in schools is a new project. Many schools do not appreciate its value nor care to give it careful thought. They are averse even to cumulative records. Under these conditions it is very necessary that activities of the bureaus of educational and vocational research should be largely expanded and the tools of guidance should be further improved and perfected. Training facilities for career masters should be increased

and improved and guidance should form an essential part of the teachers' training course. Qualified counsellors should be available at district level or for a fixed number of schools so that expert advice and guidance is available to every school.

CHAPTER XIV

EXAMINATIONS AND EVALUATION

IN the previous chapters we have studied the objectives, methods, aids and practices in education. But we also want to know how far we have succeeded in our effort, we must evaluate the outcomes of instruction. Such evaluation is considered necessary because our methods and techniques are never perfect, even our objectives have to be continually revised and reconstructed, pupils do not profit equally from instruction and not all teachers, methods of instruction and school practices are equally effective. Our success in education depends on a variety of factors which we cannot determine in advance and some system of evaluation has to be devised to measure the outcomes of our effort. It is necessary for parents and teachers to know how pupils are progressing and grade them according to their attainments. Parents and society wish to assess the work and progress of the institution where their children are being educated, and authorities consider it necessary to assess the work of the teachers. Thus the progress of pupils, teachers and schools has to be evaluated from time to time. At present examinations are the usual means adopted for the purpose.

I

The present system of examinations has always had its critics but never did it have so many or so well-informed critics as it has today. 'Rank failure', 'necessary evil', 'gamble' are some of the epithets

commonly used to describe it. Let us go over some of the limitations of the system of examinations as it prevails today. There are three main considerations:—

1. Do examinations measure accurately and reliably the outcomes of instruction?
2. How far do they help to realize the objectives of education?
3. What is their effect on the personal and educational aspects of school life?

As a device for measuring and testing human capacities and their products the present system of examinations has proved most unsatisfactory. There are very serious defects with regard to both validity and reliability. The numerous studies made reveal beyond doubt that our examinations are not at all reliable. It is easy to demonstrate that no two examiners award the same marks to an answer-paper, sometimes the divergence in the marks of examiners is very wide and even the same examiner marks the same answer-paper differently at different times. Although thousands and tens of thousands of candidates are examined simultaneously with the same question paper there is no uniformity of standard. The standard varies from one examiner to another and varies with the same examiner at different times. This is often expressed by saying that the standard is purely subjective. Secondly it is doubtful if examinations succeed in testing and measuring what they profess to be testing and measuring. For example they seek to test knowledge and understanding but succeed in testing memorization and reproduction.

Our ideas about educational objectives have under-

gone radical changes, in fact revision and reconstruction of educational objectives is a continuing process, our methods and practices are also feeling the impact of new ideas and slowly changing but our examination system stands immutable as the laws of the Medes and Persians. Educational objectives and outcomes are now conceived in terms of understandings, appreciations, attitudes, behaviour patterns and the like but examinations have a very narrow range. They test and measure only information, not even understanding, and that too in the most mechanical way of mere reproduction. Cramming and memorization alone is tested. This may have been good enough when education was selective, when opportunities for higher and secondary education were restricted and when hurdles like examinations had to be put up to weed out the unsuccessful. But today when the problem is not one of selection but of distribution of education or the extension of educational opportunities to all according to their needs, interests and abilities, when a wide variety of talents seeks opportunities for growth and development and when diversified courses are being provided for them, the means and methods of evaluation shall have to be similarly diversified. To presume that outcomes of humanities and science on the one hand and fine arts and home science on the other can be adequately measured by the same device of written essay-type questions and examinations is absurd. These outcomes may be skills, attitudes, appreciations or behaviour patterns none of which can be tested or measured by the present examinations. The present system still continues to take the traditional view of education that it is nothing more than instruction and

therefore tries to test book-learning alone. It ignores the physical, emotional and social growth and development of the young. Real evaluation will take into account all aspects of growth and development and assess the child as a whole, and not merely one aspect of it.

Lastly examinations have a very demoralizing effect on all engaged in education, teachers, pupils, administrators, parents, employers. They work on some preconceived standard of achievement and their main function is to separate the sheep from the goats, to discriminate between students who should pass or fail and to arrange those who pass in an hierarchy of high and low. The standard of assessment is unchanging, the judgements of examiners are considered infallible, those who fail are condemned as incapable and though they might have failed by a small margin of marks they have to mark time for another year thus widening the gap of a few marks into one full year, admission to higher courses and employment often depends on the results of examinations, the examiners have no knowledge of the candidates and their judgement makes or mars the future of students finally and irrevocably. No wonder, therefore, that both teachers and students attach the greatest importance to examination results, devote their best time and effort to ensure their quality and all along their work is overshadowed by the dread of examinations and they have no desire or opportunity to try creative methods of work. Very often the promotion of the teacher depends on examination results. Therefore the entire school programme and the effort of the teachers and the students is geared to examination results. It causes great emotional strain

1

both among the teachers and the taught and has a very harmful effect on the mental and bodily health of the pupils. Cases of suicides among failures are not uncommon.

Under the baneful influence of examinations education has become a technique of cooking results. Individual differences among pupils have lost all meaning and value, all pupils have to worship at the same altar, therefore subjects, their contents and methods of teaching have been standardized to meet the needs of examinations, the deeper spiritual values, the mental and moral attitudes which the study of different subjects should entail, are sacrificed, and the 'external examinable aspects of the subjects' receive exclusive emphasis. Examination time is the most important and preparation for examination is the most sacred duty of both teachers and students.

Too often careers depend on the hazards of examinations and parents are anxious that their children do well. Employers curse examinations when they find that candidates with excellent results fail to come up to their expectations. In fact the dissatisfaction of employers has contributed in no small measure to the present general condemnation of examinations.

All questions in the present system of examinations are of the essay type and not only do they leave so much for the subjectivity of the examiner but also fail to do justice to pupils whose ability for the essay type is poor. Day-to-day work of the pupil, his record in the school, his achievement in social and cultural activities, his regular attendance and the like are ignored. It encourages such malpractices as private coaching, bazar notes, guess papers etc. In every large town

there are 'academies', 'institutes' or 'colleges' which guarantee a pass for a fee within a period of months. Now this is not education whatever else it may be.

The present system can only condemn boys who fail, it does not help to find out why they have failed, where their weakness lies or how that weakness can be removed. Our examinations have no diagnostic value.

It encourages individual rivalry, individual achievement and glory and offers no scope for the development of a spirit of co-operation and mutual helpfulness. Thus it sets wrong values in life and places undue premium on practices like cramming which help individual glorification.

II

But if examinations are so bad as that why have they not been abolished so far? Or should they be abolished forthwith now? Such a step would not be wise in view of the fact that examinations have served us long and successfully. They have provided a guarantee of educational efficiency because on their account teachers and pupils have kept up their effort at teaching and learning, they have provided strong impetus for learning and improvement and they have helped not only the grading of pupils according to their achievement but also the selection of competent and efficient people for posts requiring special knowledge and capacity. A large number of young people who distinguished themselves in examinations have also done very well in life. This may be conceded but even then the adverse effect it has on the mental and physical health of both teachers and taught and how it kills all initiative and

spontaneous work is enough to call for radical changes in the system. In fact the demand for reform in examinations is fairly general and vocal. Rayment observes, 'If the present examination system is to be regarded as irrevocably fixed, we may as well cease to think about education at all.'¹

III

That our examination system needs early reform and reconstruction goes without saying but the question is in what directions should this reform take place? The Central Ministry of Education is alive to the importance and urgency of the question and a number of seminars, workshops and conferences have tackled the problem. It is not possible to change a time-honoured system overnight and the strong public opinion that is being educated is an achievement of no mean importance. It is not possible to indicate here the final shape which the examination system would or should take but the directions in which such reconstruction should move may be hazarded to provoke thought if not to advise active steps.

The evaluation of the outcomes of teaching and learning has always to be done in terms of the pupil's educational growth or progress towards some ends, objectives or goals. Unfortunately most teachers have never clearly defined their educational goals, and while marking examination work are guided by some blind notion that so many are to pass and so many to fail, so many to get first class marks and so many to be put on the margin so that they may try hard to

pass next. If they have any goals they are false or vague and incomplete. Evaluation and teaching are closely linked and both are absolutely necessary in the learning process. To teach without evaluation is to teach blindly and poorly. A good teacher guides the learning process, evaluates, changes procedure, teaches, evaluates and so on. But evaluation has no meaning and value apart from the general and specific goals that the learner seeks. One of the most important and valuable things which the *Secondary Education Commission Report* has emphasised is that subjects and courses are to be pursued in terms of specific goals. Not only the entire programme of secondary education must be planned in terms of very definite ends and objectives but all items in that programme, courses, subjects, activities, projects or units of work, must have specific objectives and must be constantly evaluated in terms of those very objectives. Now it is not possible to lay down any set of rules by which the educational outcomes of all specific courses of instruction may be judged for the very simple reason that the objectives of all courses are not the same. Achievement in every course of instruction should be measured in terms of all the objectives of that course. For example, if the objectives of a course are training in citizenship, inculcation of a civic sense and useful social attitudes, it is absolutely irrelevant and useless to try to assess proficiency in that course solely through examinations which test factual knowledge.

The function of educational evaluation is to determine how successfully educational objectives have been realized. Examinations should appraise educational effort in terms of our goals. They should not try to

prescribe goals for our programmes and efforts as is being done today. That is the task of the education planner or philosopher who in terms of the needs of society and the individual indicates the ideals, objectives and goals of educational programmes and efforts. Today he wants the younger generation to learn to live effectively in a secular democracy and expects schools to inculcate such attitudes, ways of thought and behaviour which will be helpful to that end. Examinations and means of evaluation, therefore, should assess such attitudes as well. The *Secondary Education Commission Report* has repeatedly stressed the inculcation of socially and personally desirable attitudes in high schools and these should be measured in any scheme of evaluation. Again an important function of education is the teaching of skills — not merely reading or writing but also skills in collecting, collating and interpreting facts, in using library, conducting experiments, preparing reports and the like. We make much of the skill in problem-solving and thinking but the questions set in examinations test only memorization and treat knowledge in a static way. The questions should be so formulated as to provide exercise in thinking, problem-solving, organization of ideas or their application to new situations. But that would happen only if the examiner had bothered earlier to define the educational purposes which are to guide his work, as Sri Saiyidain observes.¹

Thirdly evaluation of knowledge and useful factual information is also very important. Fortunately in this area we have developed fairly proficient objective tests and their increasing use is being stressed even in public examinations. Some progressive schools have

¹ *Evaluation in Secondary Schools*, p. 2.

already begun their use in lower classes even for promotion examinations. Lastly, and it is a great pity that much attention has not been paid to this aspect of education, the huge expenditure of money and effort on education is justified only if it contributes to social order and brings about social changes which improve the conditions of living of the large mass of people. Education is tied up with the behaviour and life of the people and its outcome in terms of social behaviour cannot be ignored. Methods and means of evaluation should, therefore, be concerned with behaviour outcomes as well. So far such social outcomes of education have been taken for granted but once society asks for them, there is nothing to show reliable results. No doubt such methods of appraising behaviour are not easy to devise but it is obvious that in any programme of total evaluation of all the outcomes of learning this cannot be avoided.

IV

After indicating the broad lines along which reform of the present system of examinations should take place, let us examine in detail some of the popular tools of evaluation now being favoured. In this connection the attention of the readers is invited to a recent publication of the All-India Council for Secondary Education, *Evaluation in Secondary Schools* which contains a summary of the theories and practices of evaluation developed in a series of workshops under the direction of Dr. B. S. Bloom to which a reference has already been made. It contains excellent illustrative materials to help the formulation of specific purposes of each subject and of relevant tests.

The evaluation tool most widely recommended in the reform and reconstruction of the examination system is the objective test. It seeks to reduce the weaknesses and defects of the written essay type of examination in which marking is purely subjective. The results of new objective tests are held to be more valid and reliable. These tests call for brief answers by one or a few words, by check marks and the like, and can be answered only if the pupil taking the examination has the necessary knowledge immediately and readily available. In an essay type of examination the number of questions to be answered is very small depending on the limited time available, generally six or seven questions out of ten or twelve have to be attempted, but in the new type of objective tests a very wide range of the subject is covered and there may be as many questions as from 50 to 100. Obviously such a test is far more comprehensive in scope and range of difficulty and needs less time as the questions have to be answered in an hour's time.

The growth and development of these new type tests has been little short of phenomenal since their inception about forty years ago. There are hundreds of objective educational tests today, covering almost every subject-matter. There are three principal kinds of information tests:

The True-False Tests consisting of a number of statements, the truth of which the pupil is asked to affirm or deny as:

Dr. Rajendra Prasad was born in Bihar

He is the President of the All-India Congress Committee

The Multiple-Choice Tests in which the pupil

chooses the correct answer out of a number of answers given as

Shakuntala was written by

1. Bhasa
2. Balmiki
3. Kalidas
4. Tulsidas

The Completion Tests in which pupils are asked to complete given statements as:

The Prime Minister derives his authority from —
These tests are so well known to teachers that it seems unnecessary to describe them in detail.

These tests reduce the element of chance or luck as they have a very wide range. Because the answers are short and specific, inessential and irrelevant details which may detract attention from the real marking are eliminated, and the subjective or personal factor is reduced to the minimum. The results are more accurate because there is only one correct answer, and are more reliable in assessing the achievement of pupils.

It is very often objected that these tests will encourage undesirable study habits. These tests emphasise more or less unrelated items of information and therefore put a premium on the mastery of unorganised subject-matter. In any case it does not encourage the learning of facts in an organised and systematic manner. Therefore it is feared that pupils will acquire undesirable study habits. This is a serious criticism when we have been arguing that all learning is essentially a process of establishing relationships. It seems strange that no systematic investigation has been made whether pupils who score high in such tests can discuss problems with intelligence and insight.

Others fear that pupils may be able to guess the right answer particularly when it is in the form of 'yes' or 'no' or 'true' and 'false'. Such a criticism shows lack of familiarity with the technique of testing. When tests are spread over the whole course and there are hundreds of items, and several tests are given, the factor of guessing is not worth considering.

Still others object, and this objection has some weight, that objective tests do not meet the demand adequately and are at best a poor substitute for the traditional examinations. But this objection is based on a wrong interpretation of objective tests. These tests no doubt offer a more accurate, more objective and more reliable assessment of the pupils' mastery of the subject-matter than is done by the traditional examinations, but those who can speak with authority insist that the use of tests has made it clear that there is no single method of measuring school success and that other types of examination like the oral and the essay type also have their place. In fact, as has already been stressed, the methods and means of evaluation shall have to be many and varied when pupils who enter secondary school have a wide variety of talents, aptitudes and interests and when the educational fare we are trying to provide is equally diverse and varied. Even objective tests shall have to be of larger variety to measure attitudes, appreciations, behaviour patterns and the like.

V

It is obvious from the foregoing discussion that the programme of evaluation should be comprehensive based not on one test or examination score but also

on information from all the available sources regarding the pupil's personal, intellectual and social characteristics, and that it should be continuous, not confined to the test at the end of the final term but extending to the whole career of the pupil in the school. His physical health, interest in games and other co-curricular activities, his hobbies, his special abilities, the social and economic position of his family, the entire home environment and the like shall have to be considered in any complete appraisal of his educational effort. Such significant information should be kept in some form of a cumulative record in which a succession of teachers over a number of years make entries annually or every term to present the pupil's status at each successive state of development.

There is a wide variety of cumulative record forms used all over the world. Many provide for case studies, anecdotal record, results of questionnaires and rating scales and the like, but the one given in the appendix is approved for use in all high schools by the West Bengal Board of Secondary Education and can be easily managed.

A plea has already been made for the use of such records in guidance. At times of class promotions the cumulative record may become the major source of data and when the pupil finally leaves the school his certificate should be based on this record. It may help to supplement the results of the public examination in a correct appraisal of the pupil. Contrasted with the snapshot information provided by the public examination such a certificate will provide a more accurate and reliable picture of the individual pupil.

It may be stressed that these records have no value

if they are not judiciously interpreted and used in guidance and evaluation.

VI

A few words about the 'essay' type of tests or questions. It has already been pointed out that the so-called objective tests are not a panacea for all our examination ills as some teachers naively conclude from the large mass of public discussion on the subject. The essay questions have important advantages. They are particularly suitable as a means of measuring the ability to understand, organize and recall information or to pass judgment with respect to various situations. It is very difficult to devise objective tests to assess these abilities. But the essay examinations have serious defects :

1. They are highly selective, only a few items can be tested because the time needed to answer questions is limited.
2. They are very difficult to grade.
3. Students get so involved in writing that they devote greater time and attention to put up a good composition than to do justice to the material. And the examiner also too often assesses the composition rather than the material in the answer. Fine writing rather than the argument scores higher, and students unable to express themselves in presentable language are led to cram from helpbooks.
4. Marking is very subjective.

Since it is not possible to get rid of the essay examinations altogether let us emphasize some of the safe-

guards which may help to offset some of its weaknesses. In the first place questions should not be too broad and general like: 'Discuss the causes of the downfall of the Moghul empire.' or 'Discuss the causes of the Mutiny of 1857.' Questions may be more pointed requiring relatively shorter answers eliminating possibility of doubt or confusion. These will give answers more uniform, they will be easily scored and graded and the results will be more objective. Attention of the readers is invited to material available in *Evaluation in Secondary Schools*. Secondly questions should be selected with great care so as to cover the whole course. Thirdly they should be carefully framed so as to call for new organisation of ideas and facts and challenge the ability of students to arrange them to meet new situations. Lastly when questions call for longer answers the examiners must work out carefully a detailed technique of marking. Answer-papers may be read rapidly and grouped into three or four categories for detailed marking later; important points expected in the answers should be noted beforehand or a scale for marking may be prepared and marking should be done answer-wise, that is, one question should be marked in all the answer-books before taking up the next. The present practice of finishing with each answer-book independently should be discarded.

VII

In India examinations are a large-scale industry in the public sector, examining hundreds of thousands of candidates, realizing huge funds in fees and distributing large patronage in the form of examinerships

and deciding for good the fate of millions of young people who seek further education or vocational or social advancement. Thus is the country provided with guaranteed products. These examinations are highly centralized and exercise a dominating and standardizing influence on education. But everywhere in the civilized world where there are examinations there is rank discontent. And there is a large section among teachers and the general public who strongly believe that the only reform and improvement sorely needed in education is to make the existing examinations more competitive and stiffer. That is educational standards cannot be raised without raising the standards of examinations. Perhaps for them education is nothing more than examinations.

To increase the reliability, objectivity and functional validity of the existing examinations a few suggestions are made. They are based mostly on the recommendations of numerous seminars and conferences held recently.

1. There is no special advantage in subjecting fifty thousand or more students to the same examination, and wherever the number of candidates exceeds a certain limit the examining board or university should be split into more than one unit. Inefficiency, corruption and nepotism come in with unmanageable numbers.
2. There should not be too many external examinations. One great advantage of the new scheme of secondary education is that we are able to get rid of one public examination, that is, the intermediate examination.

3. The subjective factor in the purely essay type examinations should be reduced by introducing objective tests of attainments. In the beginning a small percentage of marks should be reserved for such objective tests and gradually this percentage may be increased.
4. The subjective factor can be further reduced if paper-setters prepare a key to the question paper well in advance indicating all the important points which an excellent or near-perfect answer would include. With the help of this key the several sub-examiners can mark each paper on a relatively objective basis. If the key has to be revised after examining a few papers it should be done by the head examiner and the revision notified to all sub-examiners. Or a five-point scale may be prepared. In any case every examiner must know beforehand what he is to look for.
5. In the external examinations, the assessment of the pupils should not be based merely on their results. Other things such as internal examinations and school records showing achievements in co-curricular activities, attendance, social service, art or music should also be taken into consideration and credit should be given for them.
6. In the school exclusive importance should not be given to the results of annual examinations. For purposes of promotion the results of periodical tests, the assessment of home tasks on the basis of quality and regularity, the percentage of attendance and the like should also be considered.

At present these are considered only in the case of students who fail, but it would be better if a certain percentage of marks in the annual examination are reserved for monthly tests and record of day-to-day work.

7. Questions in the external examinations should be direct and stated in easy and simple language, within the understanding of students.
8. All question papers should be printed in the language which students have offered as their medium of examination. In a number of boards and universities questions continue to be set in English even though a large majority of students answer in their mother-tongue.
9. Some provision for re-examining the contents of answer-books should be made.
10. Provision should also be made for holding examinations in parts and bi-annually.

CHAPTER XV

ADMINISTRATION

THE term 'administration' suggests control and the problem of educational administration is to control conditions in high schools to ensure the fullest possible growth and development of pupils. Its primary function is to help and improve the learning process. Learning and teaching are the most important acts of education and the duty of the administrator is to 'enable the right pupils to receive the right education from the right teachers,' to provide an equitable distribution of educational opportunities in the institution consistent with the needs of society and adapted to the aptitudes and abilities of the individuals to be educated, to ensure such conditions of work in the school as will encourage, stimulate and help each teacher to follow his or her vocation with the utmost scope for initiative and individuality, in short to ensure those essentials of the system which make for a sound process of education.

The nature and tone of educational administration depend very largely on our political and social structure on the one hand and ideals of education on the other, though the two imply each other. If society is authoritarian, whether politically or religiously, the purpose and function of educational administration will be to ensure the inculcation of such qualities as obedience, loyalty, conformity, blind submissive acceptance of the dictates of authority. If it is democratic and equalitarian it will be concerned most with those conditions that make for the fullest possible develop-

ment of the individual as a human being. If the ideal of education is to develop free, self-determined, self-directed personalities imbued with knowledge and culture, the political ideal cannot be anything other than democracy in which individual freedom is respected, in which intelligence and informed citizenship contribute to collective welfare and in which self-realization of the individual to the fullest measurement of his abilities is provided for. Authoritarian rule neither allows nor needs such values. It wants teachers and pupils to be regimented, lessons and activities to be standardized and initiative and creative impulses to be curbed and directed into a preconceived framework. All this is achieved through a central authority which gives categorical orders and sees that they are obeyed.

The choice for us in India is quite clear. To strengthen and safeguard our secular democracy we have to work for the cultivation of such qualities as tolerance, mutual co-operation, live-and-let-live attitude open-mindedness, willingness to understand and appreciate other people's point of view and the like, and these should inspire mutual relations among pupils, teachers and the headmaster in our educational institutions. Educational administration in India therefore, is bound to be democratic.

I

Growth and development takes place best in an atmosphere of freedom, and freedom does not mean absence of restraint or the right to do what one likes. It is the result of growth, of thinking things through,

making choice, taking initiative, determining one's course of action, foreseeing its consequences, intelligently adapting one's effort to the environment and the chosen goals. Freedom understood in this sense has to be won and acquired through effort, self-control and self-discipline. The programmes of multi-purpose schools as envisaged in this book will present frequent opportunities when the abilities of teachers and taught will have to meet a challenge, to solve new problems. They will need effortful thinking and help from their superiors. And as they progress they will acquire self-confidence through discussion and co-operation. The feeling that they can do it and are doing it for their own good is the feeling of freedom. Obviously such growth in self-development and self-expression also places upon them a new responsibility for intelligent self-direction and co-operation with others.

It has still to be widely realized that if young people are to be taught the right use of freedom and take their rightful place in a free self-determining country, they must be taught and educated through an atmosphere of freedom. There should be freedom of the pupil and freedom of the teacher. As Aldous Huxley points out, 'You cannot reach a given historical objective by walking in the opposite direction. If your goal is liberty and democracy then you must teach people the arts of being free and of governing themselves. If you teach them instead the arts of bullying and passive obedience then you will not achieve the liberty and democracy at which you are aiming. Good ends cannot be achieved by inappropriate means. The truth is infinitely obvious. Nevertheless we refuse to act upon it.'¹

¹ Aldous Huxley, *Means and Ends*, p. 31.

The freedom of the pupil is ensured in the new system with its emphasis on 'projects', 'centres of interest', 'units of work' around which a part of the curricular work is to be organized. The increasing use of the library, participation in various co-curricular activities, trips and excursions, the growing emphasis on individual needs and interests, and the like are making room for greater freedom of the pupil. A recognition that he is the centre of teaching and learning means that his needs and purposes are to determine the pattern of teaching and learning programmes. The self-activity methods permit pupils to have their own discussions and make their own discoveries, with only such guidance from the teacher as is quite essential. Individual and group work will be directed to a certain amount of work to be done within a certain time, the rigidity of teaching programmes and assignments will be considerably relaxed. All this means greater freedom for the pupil. By implication corporal punishment, fear and awe of teachers and the headmaster, a system of fines and the like will go by the board. When pupils and teachers work together on 'projects' and other activities seeking help and lending a hand mutual relations between the teacher and the taught will be based on affection, sympathy and understanding, many of the old problems of administration will tend to disappear and the edges of the prickles of both teachers and pupils will be blunted.

When programmes are flexible and based on partnership between the teacher and the taught, when teachers will be obliged to work out for themselves such methods of teaching as use their powers and abilities to the best advantage, when they will think for themselves instead

of carrying out the behests of others, they will have enough opportunity to exercise initiative and choice, to plan and direct their work. With the introduction of diversified courses and numerous activities and projects, work in the institutions will be decentralised into committees of teachers and students, responsibility will devolve on teachers giving large scope for initiative and individuality.

As in the case of pupils so in the case of teachers freedom has to be won. Too many headmasters will bear testimony to the fact that at staff meetings most of the teachers just keep mum. They have nothing to say because they never think about their work nor do any reading. Freedom does not mean freedom to abstain from work or responsibility but to take the initiative and direct one's ability and effort to the best advantage.

II

If secondary education is to help young people to understand, appreciate, preserve and strengthen democracy it becomes essential that our secondary schools be run democratically. The organization and administration of school programmes and work should reflect the application of basic democratic principles. The crucial problems of school administration are staff co-operation and creative leadership. Let us discuss them in detail.

The administration of any institution is always a co-operative enterprise in which the headmaster, teachers, clerical staff and students share. The success and efficiency of the institution depends on all of them

individually and jointly. Students can help the institution by doing the work assigned to them in the classroom and co-curricular activities, by helping to keep the school premises clean, maintaining order and discipline and close observance of the rules of discipline and conduct. The teachers can co-operate by doing the work assigned to them punctually and promptly, by maintaining a high standard of teaching consistent with their ability, presenting disciplined conduct in the school for emulation by their students, upholding their dignity in and outside their classes, maintaining diaries, registers, individual records and progress reports methodically and regularly, and above all checking anything going wrong in any sphere of school work. Apart from teaching work they must participate in co-curricular work according to their ability. Many teachers feel that their sole responsibility is teaching and co-curricular work is none of their concern. This is clearly a wrong view of their obligations. Whatever concerns the school concerns them, and their progress and prosperity is bound up with the success and good name of the school. Too many teachers when approached by students for help or guidance in any matter conveniently send them to the headmaster presuming that in so doing they are working very conscientiously in minding their own business. This is a wrong approach. On the other hand, teachers who are genuinely interested in the welfare of the school seldom miss an opportunity either to help and guide students when called upon to do so or to offer suggestions to the headmaster.

It must however be clearly understood that there are various degrees of co-operation depending on the

ability, aptitude and temperament of the teacher. There are in every school some teachers, particularly in the junior section, who are not very vocal at staff meetings and who may therefore be taken to withhold co-operation. In assessing teachers for co-operation all these factors must be taken into account.

But the tone and atmosphere of an institution rests very largely on the head. It is for him to establish and maintain desirable relations with all those who work with him, and encourage and help them to contribute their best to the life and work in the institutions. He is the head of the community and should function as an administrative leader. He must practise what he preaches or expects from his colleagues. His example should be an inspiration to them.

Although the responsibility for administration is that of the head he can discharge it in such a manner that a good many of his functions are shared by his teachers. Delegation of authority, frequent consultations, free discussions, due consideration of the opinions of colleagues, willingness to try their suggestions, open-mindedness, and a touch of humility will make his staff feel that it is they who are running the institution and the head is just a guide. While he should be an expert in dealing with people he should allow his colleagues to feel that any achievement in the school is entirely due to their collective effort. The staff meetings should be organised and conducted in a true democratic spirit, to take worthwhile decisions with the advice of all, and not to give assent to what has already been decided upon by either the headmaster or the management. Teachers should have the freedom to discuss and criticise, and help and guidance should

be freely asked for and given. Difficulties crop up at every step and teachers, like all professional men, should never feel shy of consulting each other. But the whole thing hinges on the headmaster. If he is a fountain head of ideas, if he is capable of throwing his false conceit and prestige in the background and coming forward with frankness and sympathy, not only to offer criticism but also guidance and help, and if he can sometimes take criticism from his colleagues who at least in some aspects of the work may be knowing better, things will definitely improve and administration will become democratic not only in form but also in spirit. Democratic administration does not imply absence of leadership. Rather it demands a creative type of leadership which calls forth, capitalizes and stimulates the initiative, resourcefulness and enthusiasm of every teacher in the school. To him the intelligence, wisdom and active co-operation of all his colleagues are readily available in the solution of their common problems and difficulties. He has greater insight, superior experience and knowledge and the confidence of status to guide, and not to usurp, his colleagues' ability to think.

III

Dr. F. W. Hart of the California University wants administration to be creative, not only to provide scope for the creative ability of teachers and pupils but also to stimulate and encourage its growth among all members of the school, both teachers and students. In fact the new changes that are being envisaged in secondary education are not merely those of form, in

organization or structure of the high schools, they aim at the reconstruction and reform of the entire approach to teaching and learning, and their successful implementation will depend on the headmasters, how wisely and tactfully they handle the changing landscape and with what readiness and understanding they imbibe the new spirit. Dr. Hart observes that such an administrator must possess the seven abilities he enumerates. They are mentioned here without comment.

The first is the ability to recognise the especially worthwhile things taking place in the school. Many teachers slow down or lose zest in their work because they have been led to feel that good or bad work does not make any difference to the head. After all recognition of one's service or merit is a great incentive to work, and the headmaster should be on the lookout for talent, integrity and efficiency among his teachers and appreciate it.

Secondly he should have the ability to spread the worthwhile thing he has discovered by bringing it to the notice of others. Often it is not an easy thing, for in every school there are a few hard-boiled teachers who out of sheer conceit of the length of their service or experience have developed a cynical sneer for anything which they do not sponsor and are not willing to change or learn. The situation is almost hopeless if that worthwhile thing is done by a young teacher. But then it is for the headmaster to find out ways and means to do it. In one school almost every teacher repeatedly bemoaned that boys do not keep their notebooks neat and are developing sloppy habits till one new teacher sent up to the headmaster notebooks in his subject which were conspicuously neat and clean. Instead of

talking about it he appointed a committee of three teachers to adjudge which class and subject had the cleanest written work and that class was mentioned after morning assembly on the first of every month. The thing did spread.

The third ability is the ability to overcome the inefficiencies of others without losing their goodwill. Human nature being what it is the headmaster ought to be able to blow hot or cold in his criticism as the circumstances demand. If he combines understanding, humanity and sympathy with objectivity and firmness he may succeed not only in improving the work of the institution but also in doing good to habitually negligent and inefficient colleagues. Teachers are sensitive and react violently to any suggestion or comment on their work, and to rub them up the wrong way is certainly not the best method of getting the best out of them.

The fourth is the ability to set goals that are within the reach of the individual. To spot out what teachers are suitable for various activities in the school and to tempt them to go on striving for better work is one of the important responsibilities of the headmaster. Every teacher has his strong point or pet interest and he should be marked out and encouraged to capitalize it in the best interest of both himself and the institution.

The fifth is the ability to make every teacher feel that he is worthwhile and important to the institution, that even though he is working in a junior class his job is as important as that of any other teacher. The morale of every teacher should be kept high. Teachers in India are working under many disabilities but if they

receive consideration and regard from their head they will try to overcome them.

The sixth ability is that of making every one grow professionally. Facilities for study and training should be made available and the head should see how each teacher can add to his qualifications and improve his status.

Finally he should be able to make all those who work for or with him happy. No one can be successful unless he is happy, and we all work ultimately for happiness. While we have recognised the need of making school a joy for young people we have yet to realise the need and importance of making school happy for teachers.

Only those who possess these abilities should aspire to creative leadership of the democratic community that we wish high schools to become. The task of administration is not mere autocratic rule or merely getting things done, but to inspire both students and teachers to achieve the best they are capable of, and that is only possible if heads have not only scholarship, insight and experience but also a touch of human understanding, kindness and sympathy to inspire devotion, loyalty and co-operation among their colleagues.

IV

Should teachers participate in the administration of the school? In many areas of school-work teachers are already participating in administration, in keeping attendance records, sending progress reports and filling cumulative record cards, and in sharing work

with the headmaster they are already carrying on certain administrative duties. But the question refers to their representation on the management boards. Too many headmasters do not relish the idea. Teachers are employees and they have to carry out the orders of the headmaster and the managing committee. Such a position is untenable in view of the democratic approach we have advocated in all matters relating to administration. The position of teachers as members of a free and responsible profession should be recognised and unless they share responsibility for the success of the school they cannot contribute their best to it. What should be the nature of this share in school administration will rest on a number of factors, and it varies from state to state. In West Bengal two representatives of teachers are full-fledged members of the managing body and no managing body can be approved without fulfilling this condition. But all that is stressed here is that the best professional intelligence of teachers should be available for consultation to both the headmaster and the management, and if it does not get any official opportunity for its expression it will lead to unrest, frustration and defeatism which mar the outlook of most of the staffs in schools.

V

Elsewhere in this book the need and importance of parent-teacher co-operation has been stressed. It is equally essential that parents and guardians should be associated with the administration of schools. After all their sons and wards are being educated in the school and their opinion and views should be

given due weight and consideration. An average headmaster fears that they will try to interfere in the work of administration in favour of their wards. But he forgets that they can also be exploited by him in transmitting, interpreting and enriching educational objectives and programmes in the light of local environment and their intelligent support of school programmes will be a great advantage to the school. Two or three representatives of guardians should be on the managing committee of every high school and in West Bengal the number has recently been raised from two to three. They are to be elected every three years and cease to be members if their wards leave the school.

Elsewhere a plea has been made that high schools should make use of community resources in co-curricular activities and projects. The association of parents in the work of administration will afford ample opportunity to the headmaster to capitalize such resources through these representatives. They will also act as a healthy liaison between the school and the community.

VI

During periods of reconstruction and reform of education, efficient and sympathetic supervision, is as important as trained teachers, knowing their job and doing their duty sincerely and earnestly. If the teachers' main concern is the pupils, the supervisors' main concern is the teachers, but the merit of both is to be judged by their effect on the progress of pupils. In a programme of educational reconstruction the training of administrators and supervisors is a necessity. Happily the Government is very much alive to this urgent need,

and already in every state a number of seminars of headmasters, headmistresses and education officers have been held to study and discuss some of the important topics and problems connected with the new changes. This is an effective medium of re-orientation and all those who have attended bear testimony to their usefulness.

Supervision should not be mere inspection, it should mean personal co-operation and help offered by one who knows more to a less experienced or less resourceful colleague. It no longer consists in dictating procedures and testing results but stresses co-operative study of teaching problems, and help in those details of work which the teacher cannot tackle by himself. Any individual teacher will improve by his own effort but wise guidance will go a long way to help. A supervisor should be a guide and friend.

Usually the headmaster supervises the work of teachers by visiting classes, scrutinising their diaries and written work, and following it up with a friendly discussion of what has been done and how it has been done. But very stimulating and helpful supervision can be exercised by committees or faculties of teachers teaching the same subject to different classes. Very useful work can be done by them in drawing up syllabi and programmes for each class for the purposes of articulating courses and standards, and they should meet every month to find how much work has been done in each class and to thrash out difficulties of different classes and teachers. They can also have demonstration lessons but the review work will help them to supervise the work done in different classes. In the beginning of the session they will help considerably

to initiate the new teachers into their duties, to select books and draw up the nature and amount of weekly assignments and to outline co-curricular work into which the teaching of their subject may extend. The senior teacher of that subject may act as the convener and another teacher may act as the recorder. Thus there may be committees for almost all the subjects and their work will greatly help the headmaster.

VII

The problem of a time-table in multi-purpose schools has exercised several headmasters. An outline is suggested here according to the scheme adopted in West Bengal where social studies, general science and general mathematics are not included in the public examination but will be taught in classes ix and x and the third language and craft will be taught in class ix only. If there are eight periods daily and four on Saturday we have forty-four periods which may be distributed as follows:

Subjects	Periods in classes		
	ix	x	xi
English ...	7	9	10
Hindi or major language	6	8	10
Third language ...	2		
Social Studies ...	3	3	
General Science ...	3	3	
General Mathematics ...	3	3	
Craft ...	2		
Three elective subjects	15	15	18

Subjects	Periods in classes		
	ix	x	xi
Library ...	1	1	2
Co-curricular activities	2	2	2
Tutorial work	2

Tutorial work is provided in the final class to do intensive work with bright students and remedial work with backward ones.

APPENDIX

CONFIDENTIAL

Introduced on.....

Class.....

Junior
-----High School Stage
Senior

CUMULATIVE SCHOOL RECORD

GENERAL DATA

Name of pupil..... Boy/Girl
(surname first)

Date of birth.....
(year) (month) (day)

Father's/Guardian's name

Address
(any change to be noted)

Name and address of School.....

Admission Register No.....Date of entry.....

Transferred to.....

Admission Register No.....Date of entry.....

(All entries in this school record are to be made *once*, at the end of each academic year.)

1. HEALTH RECORD*

Year	General health rating			Any physical defect	Serious illnesses	Any special remark
	Good	Average	Poor			
195
195
195

*To be filled in where there is no provision for separate medical examination.

2. POSITION OF RESPONSIBILITY HELD IN SCHOOL AND AWARDS, ETC., OBTAINED*

195
195
195

*A position of responsibility means a position like that of a monitor, a captain, etc., and awards include prizes, stipends, scholarships, etc.

3. INTEREST*

Categories	195 .			195 .			195 .		
	Marked	Average	Poor	Marked	Average	Poor	Marked	Average	Poor
(i) Linguistic ...									
(ii) Scientific ..									
(iii) Technical ...									
(iv) Artistic ...									
(v) Musical ...									
(vi) Agricultural									
(vii) Commercial									
(viii) Interest in household work and management									

*Rate the pupil's interests on a three-point scale and check (✓) in the appropriate column.
Do *not* rate an interest for which there is no opportunity of manifestation in school.

4. SCHOOL

Groups	Subjects (name the specific sub- jects in each group)	195 . Class		
		Average marks in per cent obtain- ed in perio- dical and annual exa- minations	Rank in each subject No. in class :	Remarks
Language and literature				
Mathematics				
Social studies				
Science				
Art				
Crafts				
Music				
Physical education				
Practical				
Other subjects				

* Give the average of marks of only those examinations

ACHIEVEMENT

[illegible]

in which the pupil has actually appeared.

5. CO-CURRICULAR ACTIVITIES*

Groups	195 . .			195 . .			195 . .		
	Above average	Average	Below average	Above average	Average	Below average	Above average	Average	Below average
(i) Games and sports									
(ii) Intellectual and literary.									
(iii) Recreational									
(iv) Social service									
(v) Others (N.C.C., Scouting, etc.)									

* Rate the pupil for each group of activities on a three-point scale and check (✓) in the appropriate column.

6. PERSONALITY*

Traits	195 .			195 .			195 .		
	Above average	Average	Below average	Above average	Average	Below average	Above average	Average	Below average
(i) Pushful ...									
(ii) Hardworking ..									
(iii) Responsible ..									
(iv) Co-operative ...									
(v) Emotionally balanced									
(vi) Self-confident									
†(vii) Work-habits ...									

*Rate the pupil for each trait on a three-point scale and check (✓) in the appropriate column.
 †Consider whether the pupil is systematic, methodical, careful or neat in work.

7. OTHER INFORMATION

1. State the nature of the behaviour-problem, if any, shown by the pupil:

(195 }
 (195 }
 (195 }

2. Name if the pupil possesses any outstanding skill or disability:

Year	Skill	Disability
195	...	
195	...	
195	...	

3. What course of study you recommend for the pupil: General/Scientific/Technical.

*4. Briefly state the grounds for your recommendation.....

*5. What type of vocation you consider most suitable to the pupil.....

*6. Briefly state the grounds for your consideration.....

*7. Any other information about the pupil you think relevant for guidance.....

*To be filled in only at the end of the final year
 of each school stage, i.e., Junior—VIII, Senior—XI

195 195 195

Signature of the Headmaster/Headmistress.

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